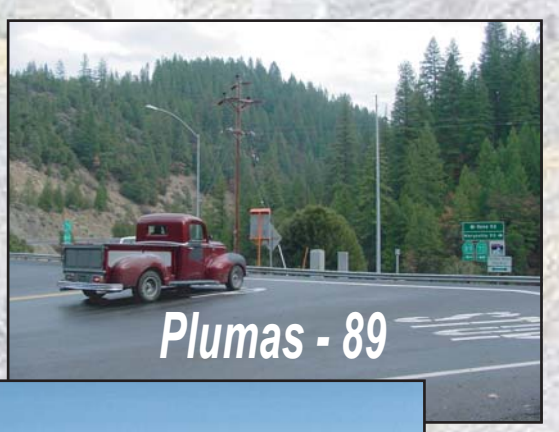
Transportation Concept Report
State Route 89

January 2002

California Department Of Transportation

District 02


Plumas - 89


Shasta - 89


Siskiyou - 89


Tehama - 89

Caltrans

Transportation Concept Report
State Route 89

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California Department of Transportation
District 02

In partnership with Plumas, Tehama, Shasta and Siskiyou Regional Transportation Planning Agencies

The Transportation Concept Report (TCR) is a California Department of Transportation System Planning Document that includes an analysis of a transportation route or corridor. A TCR establishes a 20-year consensus-based concept for how California State highways should operate and broadly identifies the nature and extent of improvements needed to attain that operating condition. A TCR identifies long-range objectives for a route and helps to guide short-term decisions for improvements. It is part of the continuing, cooperative and comprehensive transportation planning process.

Additional Information

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SR 89 TCR
January 2002

Report Signature Sheet

REPORT SIGNATURE SHEET

Transportation Concept Report-State Route 89

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SR 89 TCR
January 2002

Report Signature Sheet

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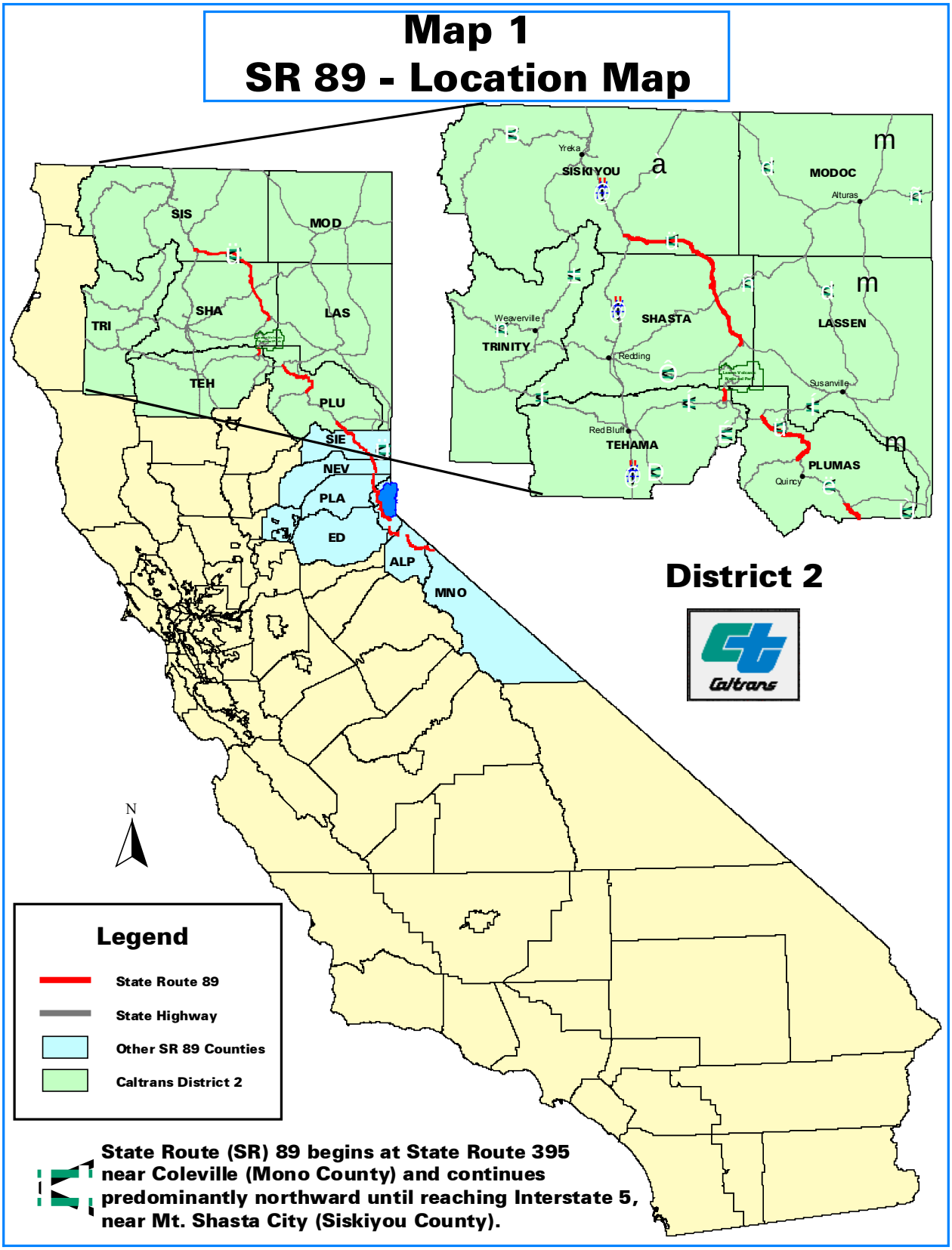
Map 1
SR 89 - Location Map
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Weaverville
TRINITY
SHASTA
Redding
LASSEN
Susanville
Red Bluff
TEHAMA
PLUMAS
Quincy
District 2
Caltrans
N
Legend
State Route 89
State Highway
Other SR 89 Counties
Caltrans District 2
State Route (SR) 89 begins at State Route 395 near Coleville (Mono County) and continues predominantly northward until reaching Interstate 5, near Mt. Shasta City (Siskiyou County).

TABLE OF CONTENTS

APPENDICES

ATTACHMENTS

LISTING OF TABLES

LISTING OF MAPS

EXECUTIVE SUMMARY

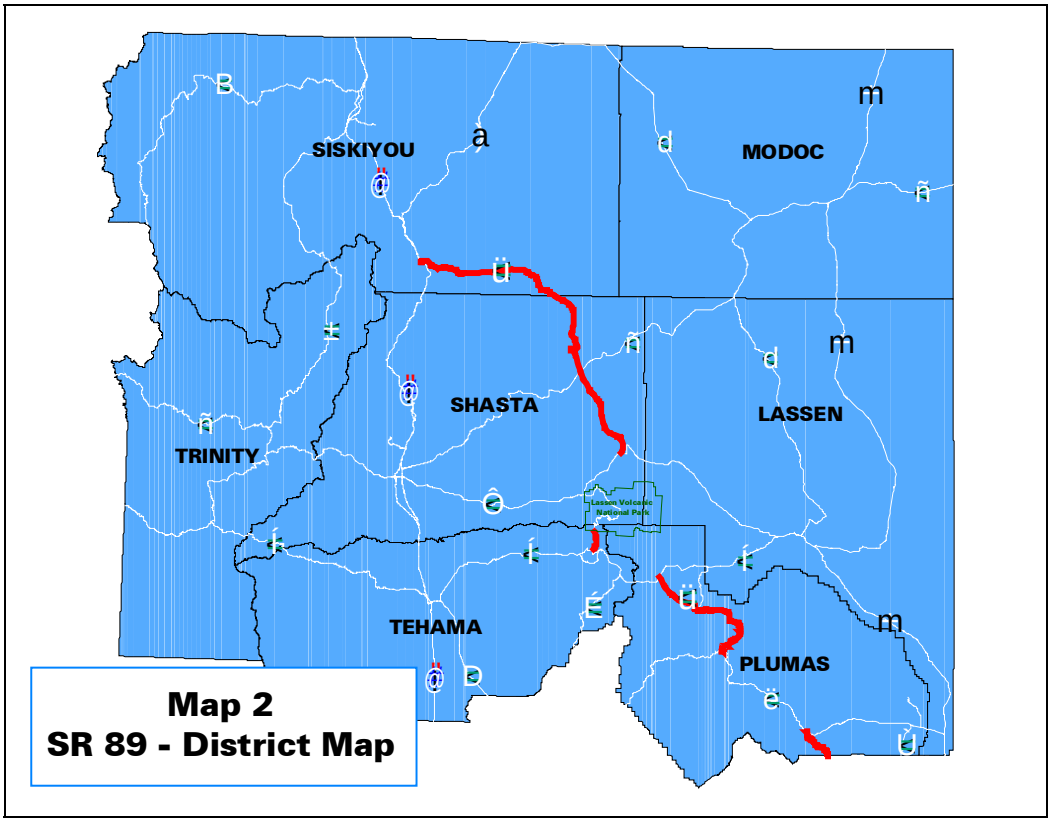
Introduction

This Transportation Concept Report (TCR) contains the vision for the future of State Route (SR) 89 as shared by the California Department of Transportation-District 2 and the Regional Transportation Planning Agencies, counties, cities, local organizations and public involved with or affected by SR 89. It includes an assessment of the current and future operating conditions on the route and the improvements that will be necessary to meet identified operational goals. The SR 89 TCR is organized into five sections:

Section I:	Executive Summary
Section II:	Public Outreach and Stakeholder Involvement
Section III:	General Information
Section IV:	Route Segments
Section V:	Segment Fact Sheets

Route Description

Map 2 displays the boundaries of the California Department of Transportation-District 2 and highlights SR 89. Within District 2, SR 89 provides a linkage between I-5 and routes 36, 44, 70 and 299. SR 89 serves both local and interregional travel, providing access to many small communities in northeastern California as well as major recreational attractions and resource areas. It also serves as an emergency detour when I-5 between Redding and Mt. Shasta is closed due to traffic incidents or inclement weather.



Map 2
SR 89 - District Map

Proposed Focus Route Designation

Given the importance of SR 89 to the regional and interregional highway network in northern California, District 2 recommends re-designation of SR 89 as a Focus Route. This recommendation is based on a number of important considerations, including:

- Provides north-south and east-west connectivity in the eastern half of the District
- Serves as the only access route for many small communities
- Is the gateway to millions of acres of local, state and national recreational lands
- Offers access to substantial timber, agricultural and mineral resources;
- Links I-5 and U.S. 395 as well as the states of Oregon, Nevada and California;
- Is utilized for goods movement between Reno and I-5 (similar to I-80);
- Is the emergency detour between Redding and Mt Shasta when I-5 is closed.

In addition to the above factors, SR 89 meets a number of the criteria outline in the Interregional Transportation Strategic Plan for designation as a focus route, including:

- Provides access to major state gateways (Oregon and Nevada);
- Facilitates significant interregional trips;
- Balances and enhances north-south and east-west connectivity and access;
- Ensures rural connectivity and mobility;
- Maintains access to agriculture, timber and mining resources and improves the opportunity for growth in the important recreation and tourism markets.

Issues and Constraints

This TCR identifies a number of issues and constraints on SR 89 - some that currently exist and others that are anticipated to arise during the next twenty-years. Issues were identified using a number of methods including capacity analysis, technical studies, meetings with local and regional agencies and public workshops. The issues and constraints identified fall into two general categories: capacity (expand the vehicle carrying capability of highway) and operational (enhance/modify operation of the existing highway).

Capacity

Segments that will operate at or below the concept level of service (LOS) D during the planning horizon if improvements are not undertaken are shown below (a summary of segment locations and lengths is provided in Table 16 on page 36). When at LOS D on a two-lane highway, the typical vehicle is traveling at roughly 75 percent of the posted speed and following behind another vehicle approximately 75 percent of the time.

Segments at or Below Concept		
Planning Year	**Segments at Concept LOS**	**Segments Below Concept LOS**
2000	6, 7	
2010	2, 6, 8, 14, 15	7
2020	2, 6, 8, 12, 15	7, 14

Operational

The most significant operational issues identified during preparation of the TCR include:

- Narrow width of treated shoulders limits recovery area for errant vehicles and the opportunity for bicycle travel.
- Vegetation growth along the highway limits vehicle recovery area, visibility of deer and other wildlife, and solar exposure of the travel way.
- Left and right turning vehicles cause delay to through traffic in a number of locations.
- Lack of sidewalks, bicycle lanes and controlled parking in the small communities along the route contribute to sporadic congestion and detract from small town ambiance.
- Movement of freight and other goods by truck is restricted in several locations by geometric conditions and/or structure restrictions. There are also weight and length restrictions along SR 89 in District 3 (Sierra and Nevada Counties).
- Other minor issues (cross slopes, local road approaches/connections, intersection control devices, alignment, etc.).

Proposed Improvements

A number of improvements have been identified to address the issues identified during preparation of the TCR. Those improvements fall into two categories: improvements to maintain concept LOS and other potential improvements.

Improvements to Maintain Concept LOS

Add passing lanes in seven locations:

- Segment 7 (Southbound)
- Segment 8 (Northbound, Southbound)
- Segment 12 ((Northbound, Southbound)
- Segment 14 (Southbound)
- Segment 15 (Southbound)

Extend passing lanes in two locations:

- Segment 14 (Northbound)
- Segment 15 (Southbound)

Other Potential Improvements

- Establish standard shoulders
- Establish Clear Recovery Zones
- Establish left and right turn lanes in multiple locations
- Beautification and Modernization improvements in small communities along the route (sidewalks, bicycle lanes, parking, drainage facilities, landscaping)
- Improve vertical clearance at Blairsden Railroad Underpass
- Improve clearances at Wolf Creek Railroad Underpass
- Various minor improvements (super-elevation correction, turnouts, modification of intersection control, curve correction, etc.).

Completion of the above improvements will help District 2 and its transportation partners ensure that SR 89 meets the needs of local and interregional travelers through the year 2020. Some of the proposed improvements have the added benefit of helping local and regional agencies meet other planning and development objectives. Implementation of many of the improvements will require funding and delivery partnerships between Caltrans and its local and regional partners.

PUBLIC OUTREACH AND STAKEHOLDER INVOLVEMENT

Development and approval of the SR 89 TCR involved a variety of stakeholders at the Federal, State and local level, including: regional transportation planning agencies, cities and counties, economic development and business interests, resource agencies, tribal governments, and the general public. Diverse and ongoing involvement was necessary to help ensure that the TCR identified and addressed the needs of the system operators, users, and the people and environment affected by the system.

Public outreach and stakeholder involvement was achieved in a number of ways during preparation of the TCR, including:

- Press releases, newsletters, posters and comment cards.
- Meetings with Regional Transportation Planning Agencies.
- Meetings with local officials and staff from local agencies.
- Interviews with representatives from community organizations.
- Phone interviews and conference calls.
- Five public workshops.
- Presentations to Local Transportation Commissions, City Councils and Boards of Supervisors.

Some of the key issues identified during this outreach and the manner in which they were addressed are outlined on the following page. For more information on public involvement during development of the SR 89 TCR, refer to ***Appendix B***.

Selected Examples of Responses to Key Stakeholder Comments	
Issue	**Recommendation**
Deer crossing highway	Vegetation Removal, Clear Recovery Zone
Open Range/cattle on highway	Vegetation Removal, Clear Recovery Zone
Visibility of animals/vehicles (site distance)	Vegetation Removal, Clear Recovery Zone
Enhance passing opportunities	Add passing lanes, turnouts
Truck/RV impacts on traffic conditions	Add passing lanes, turn outs, treated shoulders
Accommodate bicycles	Add treated shoulders
Improve economic conditions	Beautification and Modernization
Weather conditions (snow, fog, ice)	Increase solar exposure, Clear Recovery Zone, Intelligent Transportation Systems
Improved traveler information	Intelligent Transportation Systems
Impact of recreation/second homes	Monitor through Local Development Review process
Impact of development on traffic	Monitor through Local Development Review process
Enhance/accommodate environment	Known sites and resources identified in TCR
Improve opportunities for funding	Pursue designation as Focus Route
Enhance safety	Many recommendations positively affect safety
Change existing signage	Outside scope of TCR (issue forwarded to Traffic Operations Office)
Raise/lower Speed limit	Outside scope of TCR (issue forwarded to Traffic Investigations Office)[1]
Scenic designation	Outside scope of TCR [2]
Changes to highway striping standards	Outside scope of TCR [3]
Changes to regulations governing signage	Outside scope of TCR [4]
Standards for obtaining drivers license	Outside scope of TCR [4]

1. The California Vehicle Code governs establishment and modification of speed limits. The Department of Transportation has limited discretionary authority in the matter.
2. Application for scenic designation is by local government or community group.
3. Standards established by the Department of Transportation in the Traffic Manual and apply statewide.
4. Regulations/standards not set by the Department of Transportation.

GENERAL ROUTE INFORMATION

Route Description

State Route (SR) 89 was originally added to the State Highway System as SR 83 in 1933. The designation was changed to State Route 89 and the entire route was added to the Freeway and Expressway System in 1959. SR 89 begins at SR 395 near Coleville (Mono County) and continues predominately northward until reaching Interstate 5 near Mt. Shasta City (Siskiyou County). The route also passes through four California Department of Transportation Districts: 2, 3, 9 and 10. The route crosses through four counties in District 2: Plumas, Tehama, Shasta and Siskiyou. SR 89 in District 2 extends from the Sierra-Plumas county line northerly through Quincy around Lake Almanor and through Lassen Volcanic National Park to State Route 299 about five miles east of Burney. There the route continues northwesterly through McCloud to a junction with Route 5 near Mount Shasta. State Routes 36, 44, 70, 299 and Lassen Volcanic National Park-Main Park Road are east-west highways/roads intersecting SR 89.

The California State Highway System consists of routes described in the California Codes-Streets and Highway (Chapter 2, Article 3). SR 89 in the District 2 area is described as:

- Route 80 near Truckee to Route 70 near Blairsden.
- Route 70 near Indian Falls to Route 36 near Deer Creek Pass.
- Route 36 near Morgan Summit to Lassen Volcanic National Park.
- Route 44 to Route 5 near Mt. Shasta.

The following table shows the length in miles of SR 89:

Table 1: Length of State Route 89

Area	Miles
Plumas County	42.1
Tehama County	4.4
Shasta County	43.4
Siskiyou County	34.3
District 2 Total	**124.2**
State Total	**243**

Source: California Department of Transportation, Transportation System Information Program

SR 89 is signed coincident (shares designations) with the following routes 36, 44 and 70 in the following locations:

- Route 70 near Indian Falls to Blairsden (PLU 33.026/66.628).
- Route 36 near Mineral to near Chester (TEH PM 87.625/104.002 and PLU PM 0.000/6.287).
- Route 44 near Lassen Park to Old Station (SHA 49.353/62.685).

Those portions of SR 89 that run coincident will be addressed in the TCR for the other routes.

Regional Setting

Plumas County

SR 89 passes through Plumas County, which is located in northeastern California at the northern boundary of the Sierra Nevada and the southern boundary of the Cascade Range. The county covers 2,618 square miles. Approximately 24 percent of the land is private ownership, while the remaining balance is in public ownership.

SR 89, a major highway in Plumas County, runs north-south. SR 70, running east-west, is another major highway that transverses the county. In addition, SR 36 and SR 49, SR 147 and SR 284 serve as roads to specific destinations. State Highways are 10% of maintained mileage in the County, but account for 59% of Daily Vehicle Miles of Travel (DVMT).

Tehama County

SR 89 passes through Tehama County, which lies near the north end of the Sacramento Valley. The county covers 2,976 square miles. Approximately 73.6 percent of the land is private ownership, while the remaining balance is in public ownership.

SR 89 runs north-south and serves as a road to a specific designation-Lassen Volcanic National Park.. SR 172, running east-west, and SR 32, running north-south, both serve as roads to specific destinations. In addition, three major highways transverse the county, I-5 running north-south, SR 99 running north-south and SR 36 running east-west. State Highways are 12% of maintained mileage in the County, but account for 68% of DVMT.

Shasta County

SR 89 passes through Shasta County, which is located in the extreme north end of the Sacramento Valley. The county covers 3,788 square miles. Approximately 69.5 percent of the land is private ownership, while the remaining balance is in public ownership.

SR 89 runs north-south and is a major highway in Shasta County. Three other major highways transverse the county, I-5 running north-south, SR 44 running east-west and SR 299 running east-west. In addition, SR 36, SR 151 and SR 273 serve as roads to specific destinations. State Highways are 11% of maintained mileage in the County, but account for 59% of DVMT.

Siskiyou County

SR 89 passes through Siskiyou County, which is located on the California-Oregon border. The county covers 6,300 square miles. Approximately 37 percent of the land is private ownership, while the remaining balance is in public ownership.

SR 89 runs north-south and is a major highway in Siskiyou County. Three other major highways transverse the county, I-5 running north-south, SR 97 running north-south and SR 139 running east-west. In addition, SR 3, SR 96, SR 161, SR 263 and SR 265 serve

as roads to specific destinations. State Highways are 10% of maintained mileage in the County, but account for 69% of DVMT.

Route Purpose

The primary purpose of SR 89 within District 2 boundary is to provide a north-south linkage between the major facilities of I-5 and State Routes 299, 44, 36 and 70. SR 89 is also used for commuter traffic, access to recreational areas, emergency detour and goods movement. SR 89 serves as a local commuter route in Greenville and between McCloud and Mt. Shasta. It also serves as a major access route to the recreational areas of Mohawk Valley, Lake Almanor, Lassen Volcanic National Park, McArthur-Burney Falls Memorial State Park, Hat Creek and McCloud River. In case of an Interstate 5 closure between Redding and Mt. Shasta, traffic will use a portion of SR 89 and State Route 299 as an emergency detour route. This route is also used for truck traffic with volumes as high as 30% of the Annual Average Daily Traffic (AADT) at some locations. The route continues into Districts 3, 9 and 10. In District 3, SR 89 links to I-80 and the north and south shore areas of the Tahoe Region.

Facility Concept and Level of Service

Facility Concept

Facility Concept is a general term used to describe the number of lanes and degree of access control on a State Route or Freeway. *Existing Facility* is used to describe the current, built facility. *Twenty-year Facility Concept* is used to describe the facility that must be developed during the twenty-year planning horizon to accommodate projected traffic volumes. *Post Twenty-year Concept* is used to describe the facility that will be required to maintain concept level of service beyond the twenty-year planning horizon. Table 2 summarizes Facility Concept for SR 89.

Table 2: Facility Concept for State Route 89	
Planning Horizon and Setting	**Concept**[1]
Existing	
Entire Route	Two-lane conventional highway/expressway with intermittent passing lanes.
Twenty-Year	
Rural Undeveloped	Two-lane conventional highway/expressway with intermittent passing lanes.
Developed[2]	Conventional highway with two or more lanes as necessary to accommodate local and business traffic. Parking, sidewalks and other features will be designed to enhance community setting.
Post Twenty-Year	
Rural Undeveloped	Two-lane conventional highway/expressway with intermittent passing lanes, except the segment from McCloud to Mt. Shasta which is 4-lane highway/expressway
Developed[2]	Conventional highway with two or more lanes as necessary to accommodate local and business traffic. Parking, sidewalks and other features will be designed to enhance community setting.
[1]In meeting the facility concept, it is the District's goal to provide standard lane and shoulder widths, clear recovery zones and alignment that meets design speed. [2]Communities of Graeagle, Crescent Mills, Greenville, Canyon Dam and Hat Creek.	
Source: California Department of Transportation, District 2 Office of System Planning	

Level of Service

Level of Service (LOS) is a rating that uses qualitative measures to describe the operational conditions within a traffic stream. The rating scale ranges from A through F. "A" describes light traffic conditions with average travel speeds at the posted limit, and "F" describes the point at which a facility reaches its capacity and operational breakdown occurs. *Concept Level of Service* is used to describe the target operational condition for a facility during the twenty-year planning horizon of the TCR. Planning studies for projects to improve highway capacity should begin at the time when a highway segment is projected to reach the concept LOS. Background information on highway capacity analysis and Level of Service is provided in ***Appendix C***.

Concept LOS: D

Route Designations

The Functional Classification of SR 89 in Plumas and Tehama Counties is a Minor Arterial and in Shasta and Siskiyou Counties the route is a Principal Arterial. Tables 3 and 4 present other designations that may affect planning and/or operations on SR 89. These designations are defined in **Appendix A: Glossary**.

Table 3: State Route 89 Designations				
Designation	**Plumas County**	**Tehama County**	**Shasta County**	**Siskiyou County**
IRRS[1]	Yes	Yes	Yes	Yes
High Emphasis Route[1]	No	No	No	No
NHS[1]	No	No	Yes	Yes
ITSP Focus[2]	No	No	No*	No*
ICES[2]	No	No	No	No
Freeway/Expressway[2]	Yes (Portions)	No	No	Yes (Portions)
Strategic Highway Network[2]	No	No	No	No
Lifeline[2]	No	No	No	No
National Truck Network[2]	No	No	No	No
Terminal Access[2]	Yes (Portions)	No	Yes	Yes
[1]Federal Designation; [2]State Designation *District proposes to re-designate as a Focus Route.				
Sources: California Department of Transportation, Transportation System Information Program				

Table 4: State Route 89 Scenic Designations				
Designation	**Plumas County**	**Tehama County**	**Shasta County**	**Siskiyou County**
All American Road[1]	No (Portions Eligible)	No (Eligible)	No (Eligible)	No (Eligible)
National Scenic Byway[1]	No (Portions Eligible)	No (Eligible)	No (Eligible)	No (Eligible)
U.S. Forest Service Byway[1]	Yes (Portions)	Yes	Yes	Yes
Historic Highway[1]	No	No	No	No
State Scenic Highway[2]	No (Portions Eligible)	No (Eligible)	No (Eligible)	No (Eligible)
[1]Federal Designation; [2]State Designation				
Sources: California Department of Transportation, Bureau of Land Management and United States Forest Service				

Population, Employment and Housing

An understanding of population, employment and housing trends is important when developing traffic forecasts. Increased demand for travel (growing traffic volumes) can generally be expected when there is growth in all three categories. When trends are not consistent between categories or between various regions in the State, the effect on travel patterns is more difficult to assess. The following tables provide information on population, employment and housing in the counties along SR 89 in District 2.

Population Trends

The California State Department of Finance (DOF) listed the State of California population as 29,976,000 in 1990 and 32,521,000 in 2000. This represents an increase of 8.5% over the ten-year period (1990-2000). DOF anticipates the population of the State of California to be 41,373,000 in 2020. This is an increase of 27.2% in the twenty-year period (2000-2020). In the four California counties along SR 89, growth is also represented in the table below. It is important to note, however, that the major population centers in these counties are not located along SR 89.

Table 5: County Populations

County	1990	2000	Percent Change 1990-2000	2020 Projected	Percent Change 2000-2020
Plumas	20,195	20,350	0.76	23,077	11.8
Shasta	150,146	167,000	10.1	240,975	30.7
Siskiyou	43,531	44,301	1.8	53,900	17.8
Tehama	50,823	56,200	9.6	83,996	33.1
Total for Counties	**264,695**	**287,851**	**5.6**	**401,948**	**27.8**

Source: California Department of Finance, Demographic Research Unit

There are a number of small, unincorporated communities along SR 89. The population in these communities ranges between 37 and 1,600.

Table 6: State Route 89 Community Populations

County	Community on Route	1990 Population	2000 Population	Percent Change 1990/2000
Plumas	Clio	60	90	33.3
Plumas	Graeagle	300	831	63.9
Plumas	Crescent Mills	200	50	-300.0
Plumas	Greenville	1,500	1,160	-29.3
Plumas	Canyon Dam	100	37	-170.3
Shasta	Hat Creek	180	250	28.0
Siskiyou	McCloud	1,700	1,600	-6.25

Sources: California Department of Finance, Demographic Research Unit and County Planning Departments

Employment Trends

The U.S. Department of Commerce predicts the number of jobs in the State of California to grow from 27,168,400 jobs in 1998 to 33,580,600 in 2008. This represents an increase of 23.6% in the ten-year period (1998-2008). In the four California counties along SR 89, there were 135,315 jobs available in 1998. In 2010, the job growth projection for these four counties is 152,800. This represents a 16.4 % increase in jobs. Job creation is slower than population growth due primarily to growth in retirees.

Table 7: County Job Growth			
County	**1998**	**2005 Projected**	**2010 Projected**
Plumas	10,338	10,660	11,700
Shasta	79,968	87,300	91,300
Siskiyou	23,526	24,000	25,000
Tehama	21,483	23,600	24,800
Sources: U.S. Department of Commerce and California Employment Development Department			

Housing Trends

The California DOF lists total housing units in the state in 1990 as 11,182,882 and in 2000 as 12,309,567. This is an increase of 10.0% in the ten-year period. In the four California counties along SR 89, total housing units added up to 92,097 in 1990 and 107,165 in 2000. This represents an increase of 23.6% in total housing units. A significant portion of this housing stock, however, is located in larger communities not along SR 89. Owner-occupied housing is the predominant occupancy category in all four counties. Growth, vacancy and second home ownership rates vary in the four counties, with the lowest rates occurring in Shasta County and the highest in Plumas County.

Table 8: Total Housing Units			
County	**1990**	**1995**	**2000**
Plumas	10,130	11,274	11,902
Shasta	49,942	55,999	59,545
Siskiyou	16,651	17,516	18,035
Tehama	15,374	16,802	17,683
Source: California Department of Finance, Demographic Research Unit			

Land Use

A wide variety of land use activities are found along California highways. These activities range from undeveloped open space to highly developed urban areas. The nature of land use in a highway corridor has significant influence on the level and type of traffic on the highway. Undeveloped forestland may generate relatively few trips but significant truck traffic. The number and type of trips generated by residential, commercial and industrial land uses vary considerably. Changes in land use can substantially alter travel patterns over time.

Land uses along SR 89 include forestland, agriculture, recreation, residential and retail/commercial. Over half the land base along SR 89 is in National Forests or private industrial timber holdings. Agricultural uses are found in forested areas (grazing) and on farms scattered along the route. Recreational activity occurs in both developed (parks, campgrounds, resorts, etc.) and undeveloped areas in all four counties along the route. Residential and retail/commercial uses are generally concentrated into the small communities along SR 89.

One method to help ensure compatibility between local land use decisions and the statewide transportation system is the California Department of Transportation's Intergovernmental Review (IGR) process. Potential development projects are reviewed

to determine what impacts they may have on the State's transportation facilities. Impacts can include level of service changes, right of way protection issues, ramp and intersection operations and maintenance issues. The IGR process has identified the following potential changes in land use along SR 89 that might impact the transportation system in the future:

- Continued residential development in the Graeagle area. Whitehawk and Gold Mountain are scheduled for expansion.
- The community of Greenville has some potential for residential growth and development in the industrial park. Additional development in this area will be possible after reorganization of the water system and development of a sanitary sewer system.
- East of SR 89, along SR 147, Plumas County Road A-13 and Lassen County Road A-21 there are the developments called Walker Ranch and Bailey Creek. These developments plan to expand. Other developable parcels also exist.
- Dyer Mountain is a luxury ski resort planned in Lassen County. Access to the resort is from SR 147 and SR 89.
- In Hat Creek, there is potential for both residential and commercial developments.
- Additional commercial development at the junction of SR 89/SR 299 is possible.
- An industrial site along SR 89, which was formerly a mill, is now being operated as a quarry (Rim Rock Quarry). This quarry is expanding to add an asphalt batch plant.
- The community of McCloud has some potential for residential, commercial and light industrial growth. Additional development in this area will be possible after the construction of a central community sewage collection and treatment system.
- Residential and commercial development near the I-5 connection in Siskiyou County.
- Mr. Shasta Discovery Center is planned to open on I-5 near the junction of SR 89. This center will be a tourist attraction for visitors to the area.
- Sections of land may be traded-out from timber production to residential zoning in both Plumas and Siskiyou Counties.

Because of uncertainties associated with the existing and future economic and political climates, the scale of the development may be subject to change, and it is possible that some of the listed projects may not be developed.

Economic Setting

In District 2, SR 89 primarily traverses lightly developed rural areas. Historically, the economies of these areas depended on resource production - first gold and other minerals and then later timber. During the 1990's, the timber industry underwent dramatic changes as a result of stricter environmental regulations. Consequently, recreation and tourism have become increasingly important to the small communities along SR 89.

Following is a brief summary of the key economic activities found along SR 89:

Natural Resource Production

Despite declines, timber, mining and agricultural production continue to be significant contributors to the economy of the four counties along SR 89. Resource production and processing activities typically generate heavy truck traffic, which can significantly impact highway operating conditions in mountainous areas. This impact comes from many trucks entering and exiting the highway and carry heavy loads.

Retail/Commercial

Most retail and commercial activities along SR 89 are located in the small communities on the route such as Graeagle, Greenville, Hat Creek and McCloud. While some businesses cater to only local residents or tourists, most serve both. During peak recreational periods, the combination of local and non-local traffic utilizing commercial areas can create sporadic localized congestion.

Government

Federal, State and local government are significant employers in the counties along SR 89. Given the number and size of government facilities located directly on SR 89, however, their affect on traffic levels is minimal.

Recreation/Tourism

The travel industry is a major component of California's economy and a primary industry in many local communities along SR 89. The travel and tourism industry provides 5.8% of the State's $1.3 trillion economy. During 2000, travelers in California contributed an estimated $75.4 billion to the State's economy and generated $4.9 billion in State and local tax receipts. Travel and tourism is a high-growth industry that is projected to double in size over the next decade.

Similar to nationwide trends, recreation/tourism is a large sector of the economy on SR 89. The four counties on the route, Plumas, Tehama, Shasta and Siskiyou, along with Modoc, Trinity, Lassen and Butte Counties form the tourism area called the Shasta-Cascade Region. The Shasta-Cascade Region is an outdoor wonderland, a scenic venue for camping, hiking, biking, hunting, fishing, swimming, boating, water-skiing, snowshoeing, snowboarding, downhill and cross-country skiing, and birding and wildlife viewing. Since 1992, total travel spending in the Shasta Cascade Region has grown an average of 4.5%. The following tables show the Shasta-Cascade regional impact of tourism:

Table 9: Shasta Cascade Regional Tourism Statistics-1999

Regional Travel Volume (person-trips)	7.6 million
% of CA Total Travel	3.0%
Regional Travel Expenditures ($M)	$931.0
% of CA Total Travel Expenditures	1.3%
Travel Industry Jobs in Region	19,310
% of CA Travel Industry Jobs	1.8%

Source: California Department of Tourism.

Table 10: County Benefits from Tourism-1999					
County	**Travel Expenditures ($M)**	**Payroll ($M)**	**Employment (Jobs)**	**Local Tax ($M)**	**State Tax ($M)**
Plumas	118.4	42.4	2,740	1.4	4.3
Tehama	88.8	24.1	1,690	1.2	4.5
Shasta	265.2	74.2	4,950	4.7	12.6
Siskiyou	131.8	42.4	1,690	2.1	5.6
Totals for Region	**604.2**	**183.1**	**11,070**	**9.4**	**27.0**
Totals for State	**69,711**	**23,160**	**1,079,920**	**1578**	**2874**

Source: California Department of Tourism.

Table 11: Attendance at Major Attractions on State Route 89		
Location	**2000 Attendance**	
Plumas National Forest		1,000,000
Plumas-Eureka State Park		78,753
Lassen Volcanic National Park		374,800
McArthur-Burney Falls Memorial State Park		169,014
Whiskeytown-Shasta-Trinity National Forest		702,000
Mt. Shasta Ski & Board Park	2000 summer season	10,000
	2000/01 winter season	160,000

Sources: California Department of Tourism and Mt. Shasta Ski Park Management Office.

Some specific attractions on or near the vicinity of SR 89 that receive tourist traffic are the following:

- Plumas County: Plumas National Forest, Plumas-Eureka State Park, Lake Almanor and the Feather River.
- Tehama County: Lassen Volcanic National Park.
- Shasta County: Hat Creek, Lake Britton, Pacific Crest National Scenic Trail, McArthur-Burney Falls Memorial State Park, Whiskeytown-Shasta-Trinity National Recreation Area and Lassen Volcanic National Park.
- Siskiyou County: Mt. Shasta, Mt. Shasta Ski & Board Park, Medicine Lake, McCloud Lake, McCloud River and the Shasta Sunset Dinner Train.

Recreational activities that attract visitors to these areas are camping, fishing, hunting, backpacking, bicycling, horseback riding, swimming, canoeing, gold panning, winter skiing, snowboarding, snowmobiling, steam and open air rail excursion rides and golf.

Goods Movement

Goods movement, transportation of freight rather than people, can have significant impacts on a state's economy. California's goods movement transportation system is a multimodal network for highways, rail lines, seaports, airports, pipelines, intermodal

terminals and international border crossings. Goods movement along or near SR 89 is accomplished predominately with highways, and to a lesser degree, rail and airports.

Highways (Trucks)

Trucking is an essential part of the goods movement system on SR 89 with most freight being delivered by trucks. In 1998, daily truck volumes on SR 89 ranged from approximately 0 to 655 (0.0% to 31.9% of ADT). The low occurs in Tehama County at Lassen Volcanic National Park (the park is not open to truck traffic) and the high occurs in Shasta County in the vicinity of County Road A-19. The high freight generators on SR 89 include lumber mills, shopping centers and major developed recreational sites. A portion of the trucks traveling to Reno, Nevada from Oregon and Washington utilize SR 89 rather than I-5 to I-80. Truck volumes also increase when I-5 is closed due to weather or major accidents and SR 89 is used along with SR 299 as a detour around the Siskiyou Mountains and the Sacramento River Canyon. There are no permanent weigh stations on SR 89, but occasionally California Highway Patrol (CHP) will set up temporary stations to monitor this route. CHP also directs trucks approaching the SR 89/SR 70 intersection to the permanent weigh station on SR 70.

Most of SR 89 is classified as a Terminal Access (TA) route for the National Truck Network. TA routes are portions of State or local highways that the Department or a local government has granted access for use by Surface Transportation Assistance Act (STAA) trucks. STAA trucks have longer wheelbases than California legal. The purpose of TA routes is to allow STAA trucks to travel between National Truck Network routes, reach a truck's operating facility, or reach a facility where freight originates, terminates, or is handled in the transportation process. Table 12 lists the areas along SR 89 that have length restrictions and are not TA locations. Table 13 lists location on SR 89 where height or weight restrictions exist. Portions on SR 89 South in District 3 have structure restrictions as well.

Table 12: Truck Length Restrictions on State Route 89

County	Begin/End PM	Segment Miles	Type of Restriction	Improvement to Remove Restriction:
Plumas	0.000/8.708	8.708	Advisory-less than 30 feet kingpin to rear axle	Curve corrections.
Tehama	R0.010/4.403	4.393	Advisory-less than 30 feet kingpin to rear axle	Curve corrections. Segment serves Lassen Volcanic National Park and park does not accommodate trucks.
Tehama /Shasta	Special	29.0	Closed to trucks (Lassen Volcanic National Park)	N/A. The National Park Service owns Main Park Road.

Source: California Department of Transportation, Office of Traffic Operations

Table 13: Truck Weight/Height Restrictions on State Route 89				
County	**PM**	**Structure Name**	**Type of Restriction**	**Improvement to Remove Restriction:**
Plumas	3.400	Sulphur Creek Bridge	Weight	Replacement programmed-construction scheduled 2004
Plumas	8.584	Blairsden R/R UP	Height at minimum	Improve clearance at structure
Plumas	27.360	Wolf Creek R/R UP	Height at minimum standard	Improve clearance at structure
Shasta	29.190	Lake Britton Bridge	Weight*	Environmental studies underway for possible replacement of structure
Shasta	29.340	Lake Britton R/R UP	Height*	Improve clearances at structure
*Detour from SR 89S to County Road A-19/McArthur Road from County Road A-20/Glenburn Road to SR 299W to SR 89S.				
Source: California Department of Transportation, Office of Transportation Permits				

Rail

Rail is utilized for items of extreme weight and large size or volume that needs to be transported over long distances. The major railroads carry a variety of goods interstate as well as timber products produced locally. The majority of the shortline railroads along SR 89 deliver freight (primarily timber products) to Class I railroads. Map 3 displays the railroads near SR 89 (page 35).

Major Railroads:

California is served by two major Class I railroads-Burlington Northern Santa Fe (BNSF) and Union Pacific (UP). These rail lines are almost exclusively dedicated to freight movement. BNSF operates 112 miles of track between Bieber and Keddie, California (travels along SR 89 to Lake Almanor then to Lassen County). The BNSF rail line does not make deliveries or pick ups along SR 89, but carries freight through the rail corridor to other connection points.

Shortline Railroads:

Short line railroads provide an important link in the statewide goods movement transportation system, acting as connectors to the major railroads, harbor areas, and intermodal terminals. Along SR 89, the shortlines mainly haul lumber products.

Along or near the vicinity of SR 89, there are three shortline railroads:

- Almanor Railroad Company. Collins Pine Lumber owns Almanor Railroad Company, and the line is dedicated to moving lumber from sawmill to a connection point owned by BNSF.

- Quincy Railroad Company. Quincy Railroad is owned by Sierra Pacific Industries, and is used to move lumber from sawmill to a connection point owned by UP.
- McCloud River Railroad Company. McCloud River Railroad Company has been in operation since 1897 and is independently owned. Between McCloud and Mt. Shasta, the railroad provides direct rail service to industries along its tracks. When the McCloud River Railroad is not hauling goods such as timber, wood chips and diatomaceous earth from the Burney area, it serves as the Shasta Sunset Dinner Train on weekends. The McCloud River Railroad also provides interline transfer service between BNSF at Bieber and UP at Mt. Shasta.

Airports

Air cargo carries high value, time-sensitive, or time-definite goods such as electronic equipment, emergency shipments and overnight packages. The volume of freight currently moved by air for transfer onto SR 89 is very small. There are no commercial airports directly on SR 89, but there are five commercial airports in a two-hour vicinity:

- Klamath Falls International Airport in Klamath Falls, Oregon
- Rogue Valley International in Medford, Oregon
- Reno/Tahoe International Airport in Reno, Nevada
- Truckee Airport in Truckee, California
- Redding Municipal Airport in Redding, California.

There are no publicly owned airports adjacent to SR 89, but there are six near the vicinity of the highway and carry minor freight items to the local communities along SR 89:

- Plumas County: Chester Airport in Chester, Gansner Field in Quincy and Beckwourth-Nervino Airport in Beckwourth.
- Shasta County: Fall River Mills Airport in Fall River Mills.
- Siskiyou County: Dunsmuir-Mott in Dunsmuir and Weed Airport in Weed.

All of these airports are displayed on Map 3 (page 35).

Right-of-Way

Right-of-Way is real estate acquired for transportation purposes, which includes the facility itself (highway, fixed guideway, etc.) as well as associated uses (maintenance structures, drainage systems, roadside landscaping, etc.). The existing Right-of-Way for SR 89 is summarized in Table 14.

Table 14: Existing Right-of-Way on State Route 89			
County	**Begin/End PM**	**Approximate Right-of-Way Width**	**Type of Right-of-Way**
PLU	0.00/3.00		Prescriptive
PLU	3.00/4.00	100'-150'	State Title
PLU	4.00/4.50		Prescriptive
PLU	4.50/5.60	100'-120'	State Title
PLU	5.60/7.80		Prescriptive
PLU	7.80/8.71	100'	State Title
PLU	8.72/13.5	200'-300'	*
PLU	13.5/29.5	80'-350'	**
PLU	29.5/42.185	100'-400'	With Access Control
TEH	R0.010/4.403	132'	*
SHA	0.00/14.5	100'-132'	Some Prescriptive***
SHA	14.5/43.345	100'-200'	**
SIS	0.00/8.00	100'-200'	**
SIS	8.00/8.80		Prescriptive
SIS	8.80/24.0	100'-132'	*
SIS	24.0/R34.622	100'-300'	With Access Control
* Major portions of this section are on USFS lands with limited title to the right of way.			
** Major portions of this section are on USFS lands with a special use permit.			
*** Major portions of this section are on USFS lands with a DOT easement.			
Source: California Department of Transportation, Office of Right of Way			

As observed from the table, State Route 89 has a mixture of right-of-way types:

- State Title. State title is property purchased by the State and held in fee title.
- Prescriptive. Prescriptive is a type of easement that comes into existence without formal action because of long term historical use in a corridor. When new projects are programmed along SR 89 in District 2, the California Department of Transportation will attempt to convert prescriptive rights into state title (via purchase).
- Access Control. Access control is the condition where the right of owners or occupants of abutting land or other persons to access a highway is fully or partially controlled by public authority. If individuals want to develop near the highway, they will have to go through the California Department of Transportation, District 2 Permits Office to be granted access.
- Federal Government Owned. The California Department of Transportation has limited access rights on highways located on lands controlled by the Federal Government. If additional access is needed for facility upgrade or expansion, the federal government will need to grant access.

Access Management

The type and extent of access allowed onto a highway has a direct affect on facility safety and operation – more access points or less control of access locations typically reduces travel speeds and introduces vehicle conflicts on the facility. Access Management

involves controlling or managing where vehicles are allowed to enter the highway in order to improve highway operations and reduce accidents.

Locations on SR 89 where current access conditions may affect operations include the small communities along the route: Graeagle, Crescent Mills, Greenville, Canyon Dam, Hat Creek and McCloud. In all of these communities except McCloud, access along SR 89 is undefined (unrestricted). Many building fronts face directly onto the highway. Parking areas are undefined, and there are no sidewalks. Multiple driveways and cross streets enter onto the highway. During the summer travel season, traffic can be slowed or stopped on SR 89 due to vehicles and pedestrians entering and leaving the highway right-of-way. In the community of McCloud, the number of access points (County roads) onto the highway is limited, with the majority of vehicular, pedestrian and bicycle activity occurring at one intersection. This can lead to delays for crossing traffic at peak periods.

The California Department of Transportation, District 2, will work to manage access through the following:

- Convert prescriptive rights to fee title.
- Encroachment permits process.
- Design of highway improvements.

Adoptions, Rescissions and Relinquishments

Adoption involves action by the California Transportation Commission to approve the location and general alignment of a new route or route segment. Rescission involves removing/deleting a previously adopted route alignment. Relinquishment involves the transfer of all or a portion of a State highway to a city, county or other public entity. There are no planned adoptions, rescissions or relinquishments on SR 89.

Environmental Status

The California Department of Transportation strives to maintain, operate and improve the highway in a manner sensitive to the environmental context. Environmental issues are addressed in the system planning process and the project planning and development process as early as feasible. Known environmental issues and concerns are included in a TCR so that planners, engineers and other project development staff can incorporate environmental factors into project design from the outset.

Some of the key environmental issues along SR 89:

- Air Quality (two counties pending non-attainment for one or more Federal standards)
- Biological (sensitive habitats, State and Federal listed species)
- Cultural Resources (historic and archaeological)
- Water Quality (riparian, wetland and floodplains)
- Wildlife/Vehicle Incidents

Safety

The safety information provided in this TCR was taken from Table B of the Traffic Accident and Surveillance and Analysis System (TASAS). It should be used for general planning purposes and as an indicator of how the accident rate of a particular segment compares to the accident rate averages on similar routes statewide. Higher than average rates are not alone indicators that there is an issue. Accident rates can be greatly influenced by the length of the segment as well as the time period being measured. Following is a five-year summary of the traffic collision rates for SR 89. For specific accident rates by segment refer to the Fact Sheets.

Table 15: Traffic Collision Rate (per million vehicle miles) for State Route 89

SR 89 Actual Accident Rate				Statewide Average Accident Rate			
Fatality	Fatal + Injury	Property Damage Only	Total	Fatality	Fatal + Injury	Property Damage Only	Total
.028	.560	.632	1.22	.038	.620	.622	1.28

Source: TASAS Database (January 1, 1996-December 31, 2000)

Maintenance and Operations

The State Highway System represents an enormous taxpayer investment, so preservation of the existing system is a top priority for the Department. Specific maintenance and operations concerns identified during preparation of the SR 89 TCR are addressed in the Segment Fact Sheets, but can be summarized as follows:

- Treated shoulders widths range from 0 to 10 feet (majority are less than 2 feet).
- Two summits on the route that get snow and ice in winter
- Solar exposure (freeze-thaw of structural sections)
- Limited clear recovery zone
- Floodplains
- Wildlife/vehicle incidents

Transportation Options

The categories that follow provide information regarding multimodal options (transit, rail and bicycle travel) and alternative facilities (roads that have the potential to serve as alternate routes for travelers).

Transit-Regional

Provision of transit in rural areas is challenging for a number of reasons including: long distances, limited/dispersed population base, scheduling difficulty and limited funding. Regional transit services available on or near SR 89 are as follows:

Plumas County:

- Plumas County Transit (PCT) System offers fixed route services to many locations in Plumas County. This includes stops along SR 89, such as Lake Almanor, Greenville and Graeagle. These stops are usually three times per day-morning, afternoon and evening. PCT also has carpool/rideshare matching services.
- The Greenville Rancheria Tribal Health Program operates a licensed community health clinic in Greenville. The clinic provides transportation services for tribal member clients, as well as for Medical patients that are hospitalized. The clinic's patients are transported from all over the county, and patient referrals are transported to medical facilities within and outside the county.

Tehama County:

- Tehama Area Rural Express (TRAX) operates as the transit service in Tehama County, but does not stop along SR 89.

Shasta County:

- The Redding Area Bus Authority (RABA) provides a rural commuter bus service. The commuter service is called the Intermountain Express and offers transportation into Redding from the outlying Intermountain communities of Bella Vista, Round Mountain, Burney, Johnson Park, Fall River Mills and McArthur. This service is near SR 89 stopping at Holiday Market on 299E in Burney, Sam's Pizza on 299E in Johnson Park and Mayer's Memorial Hospital and Valley Market on 299E in Fall River Mills. Two busses are utilized to provide this service.

Siskiyou County:

- Siskiyou Transit and General Express (STAGE) provides Siskiyou County's local and regional transit service. STAGE has the following routes: Yreka City (north and southbound), Klamath River/Happy Camp (SR 96), Yreka/Hornbrook (SR 3), Yreka/Montague/Scott Valley (SR 3) and Interstate 5 (north and southbound). The Interstate 5 (northbound and southbound) route service area includes McCloud and Mt. Shasta City on SR 89. McCloud's stops include the Forest Service office, Shasta/Colombero Drives, Across from the McCloud Post Office and the McCloud Community Service District Office. Near SR 89, the bus stops at South Mt. Shasta Boulevard in Mt. Shasta City. The bus stops 5-6 times at day at these locations about every 2 ½ hours.

Transit-Interregional

Greyhound Bus operates in each of the four counties along SR 89, however, service is not provided directly along the SR 89 corridor.

- Plumas County. Greyhound serves SR 70 and makes stops at the following locations: Hallelujah Junction, Spring Garden, Portola, Quincy Feather River College and Keddie Junction.
- Tehama County. Greyhound serves I-5 and makes stops at the following locations: Corning and Red Bluff.
- Shasta County. Greyhound serves I-5 and makes stops at the following locations: Anderson and Redding
- Siskiyou County. Greyhound serves I-5 and makes stops at the following locations: Dunsmuir, Mt. Shasta, Weed, Dorris, Macdoel and Yreka.

Rail Passenger Service

The only rail passenger service on SR 89 is owned by the McCloud Rail and called the Shasta Sunset Dinner Train. Special dinner trains and excursion steam trains are provided for tourists from January to October originating in McCloud. The eastbound trip heads out across the McCloud Flats past Ask Creek, Esperanza and Bartle. The westbound trip features Signal Butte, Pierce and Mt. Shasta City. These trips can provide service up to 250 people in one day. Occasionally rail passenger service is provided from McCloud to Burney. Map 3 displays the rail service near SR 89 (page 35).

Airports

Map 3 displays the airports near SR 89 (page 35). There are no commercial airports directly adjacent to SR 89, but four commercial airports in a two-hour vicinity:

- Klamath Falls International Airport in Klamath Falls, Oregon
- Rogue Valley International in Medford, Oregon
- Reno/Tahoe International Airport in Reno, Nevada
- Redding Municipal Airport in Redding, California.

There are no publicly owned airports adjacent to SR 89, but there are six near the vicinity of the highway:

- Plumas County: Chester Airport in Chester, Gansner Field in Quincy and Beckwourth-Nervino Airport in Beckwourth.
- Shasta County: Fall River Mills Airport in Fall River.
- Siskiyou County: Dunsmuir-Mott Airport in Dunsmuir and Weed Airports in Weed.

Bicycle Travel

Along the SR 89 corridor, bicycle travel is permitted. The shoulder width ranges from 0 to 18 feet with treated shoulder widths ranging from 0 to 9 feet. The California Department of Transportation, District 2 has a goal to attain 4-foot or greater treated shoulders along the route in order to provide bicyclists with a more comfortable ride. There is a Class II bicycle lane (designated bicycle facility adjacent to highway) from PM 15.46/15.75 (Crescent Mills) in Plumas County.
The California Department of Transportation, District 2, has created a District 2 Bicycling Map for bicycle riders to reference riding locations. Additional information on bicycle travel may be obtained from the counties and cities along SR 89.

Alternate Facilities

There are several state highways or arterial streets paralleling or intersecting SR 89 that can provide an alternative for travelers. In most instances, SR 89 will be the preferred route due to faster travel time. When SR 89 is closed, however, these facilities may provide viable options.

State Highways

- SR 32
- SR 36
- SR 44
- SR 49
- SR 70
- SR 80
- SR 97
- SR 139
- SR 147
- SR 161
- SR 172
- SR 299
- SR 395
- I-5

Local Roads

Appendix D includes a list of local roads that roughly parallel SR 89. These streets have the potential to serve as an alternative routes for commuters.

Related Facilities

The categories that follow represent important facilities on or near the route that help regulate traffic flow, provide amenities for travelers or are utilized in the maintenance and operation of the highway. Map 3 provides a visual representation of some of the related facilities on the route.

Bridges

Bridges are structures of more than 20 feet in length that span a body of water.

There are 18 Bridges on the route. Bridge information is provided in the Fact Sheets.

Traffic Control

The following table identifies all locations on SR 89 that are either stop controlled or signal controlled.

County	PM	Location	Type
PLU	8.72	North Junction 70/89	Stop Control on SR 89
PLU	42.185	North and South Junction 36/89	Stop Control on SR 89
SHA	21.71	Junction of 89/299	Four-Way Stop

Snow Chain Sign Locations

Snow Chain Signs are traffic signs mounted on a fixed or portable support, conveying a message or symbol to regulate, warn, or guide traffic in regards to snow conditions. SR 89 has two permanent Snow Chain Sign Locations near Snowman's Hill to chain on/off.

County	PM	Sign Location	Chain On/Off
SIS	25.901	McCloud, Colombero Drive	Chain On
SIS	34.051	Near Mt. Shasta Boulevard (near Junction of I-5)	Chain Off

Grade Separations

Grade Separations are vertical separations of intersecting facilities (road, rail, etc.) by the provision of crossing structures. With an underpass, the state highway crosses under the railroad, while an overhead the highway passes over the railroad. SR 89 has four locations of Railroad Grade Separations.

County	PM	Location	Number	Size
PLU	8.6	Blairsden Underpass	9-31	28’ Wide; 15’6” VC
PLU	19.9	South Greenville Overhead	9-39	40’ Wide; N/A VC
PLU	27.4	Wolf Creek Underpass	9-43	24’ Wide; 14’1” VC
SHA	29.3	Lake Britton Underpass	6-56	39’ Wide; 14’7” VC

Railroad at Grade Crossings

Railroad at grade crossings are places where highway traffic crosses railroad tracks at the same elevation. SR 89 has three locations of Railroad at Grade Crossings.

County	PM	Location	Number	Size
SHA	23.99	Section 22 Grade Crossing	6-55	24’ Wide
SIS	6.8	Bartle Grade Crossing	2-116	23’ Wide
SIS	24.9	McCloud Grade Crossing	2-95	54’ Wide

Passing Lanes and Turnouts

Passing lanes are portions of the roadway provided for weaving, truck climbing, speed change, or for other purposes supplementary to through traffic movement. Turnouts are short passing lanes on highways. SR 89 has nine passing lanes and two turnouts.

County	PM	Passing Lane or Turnout	Direction	Length (miles)
PLU	9.35/9.27	Turnout	Southbound	0.08
PLU	13.015/12.98	Turnout	Southbound	0.035
PLU	17.182/18.009	Passing Lane	Northbound	0.827
PLU	18.516/17.802	Passing Lane	Southbound	0.714
PLU	24.9/25.8	Passing Lane	Northbound	0.90
PLU	38.11/39.11	Passing Lane	Northbound	1.00
PLU	39.24/38.50	Passing Lane	Southbound	0.74
SIS	26.391/26.645	Passing Lane	Northbound	0.254
SIS	29.148/29.461	Passing Lane	Northbound	0.313
SIS	29.537/29.192	Passing Lane	Southbound	0.345
SIS	32.425/32.160	Passing Lane	Southbound	0.265

Safety Roadside Rest Areas

Safety Roadside Rest Areas are roadside areas provided for motorists to stop and rest for short periods. State facilities usually include paved parking areas, drinking water, toilets, tables, benches, telephones and information panels. Other agencies may also operate the Safety Roadside Rest Areas with different ranges of amenities. The United States Forest Service (USFS) operates the only rest area on SR 89, and there are two Safety Roadside Rest Areas in the vicinity of SR 89.

County	SR	PM	Name	Operator
PLU	89	36.63	Lake Almanor	USFS
PLU	70	49.790	Massack	California Department of Transportation
PLU	36	R12.795	Lake Almanor	California Department of Transportation

California Department of Transportation Maintenance Stations

Maintenance Stations are facilities used by the Department to maintain the highway year- round. These maintenance stations are responsible for SR 89:

Station/Station Number	PM Coverage on SR 89	Station Phone Number
Quincy 2-70	PLU 0.00/PLU 23.2	(530) 283-2612
Chester 2-74	PLU 23.0/PLU 42.3	(530) 258-2681
Mineral 2-75	TEH 0.010/TEH 4.403	(530) 595-4433
Hat Creek 2-64	SHA 0.00/SHA 10.86	(530) 335-7101
Burney 2-38	SHA 10.86/SIS 11.4	(530) 335-2261
Mt. Shasta 2-37	SIS 11.4/SIS R34.622	(530) 235-2839

California Department of Transportation Sand Houses

Sand houses are storage facilities for abrasives and deicers. Sand houses are located in areas where temperatures are consistently low enough in the winter to cause a frozen crust on the highway. SR 89 has three sand houses on the route.

County	PM	Location
PLU	29.3	Almanor
SIS	11.3	Bartle
SIS	24.060	McCloud

Vista Points

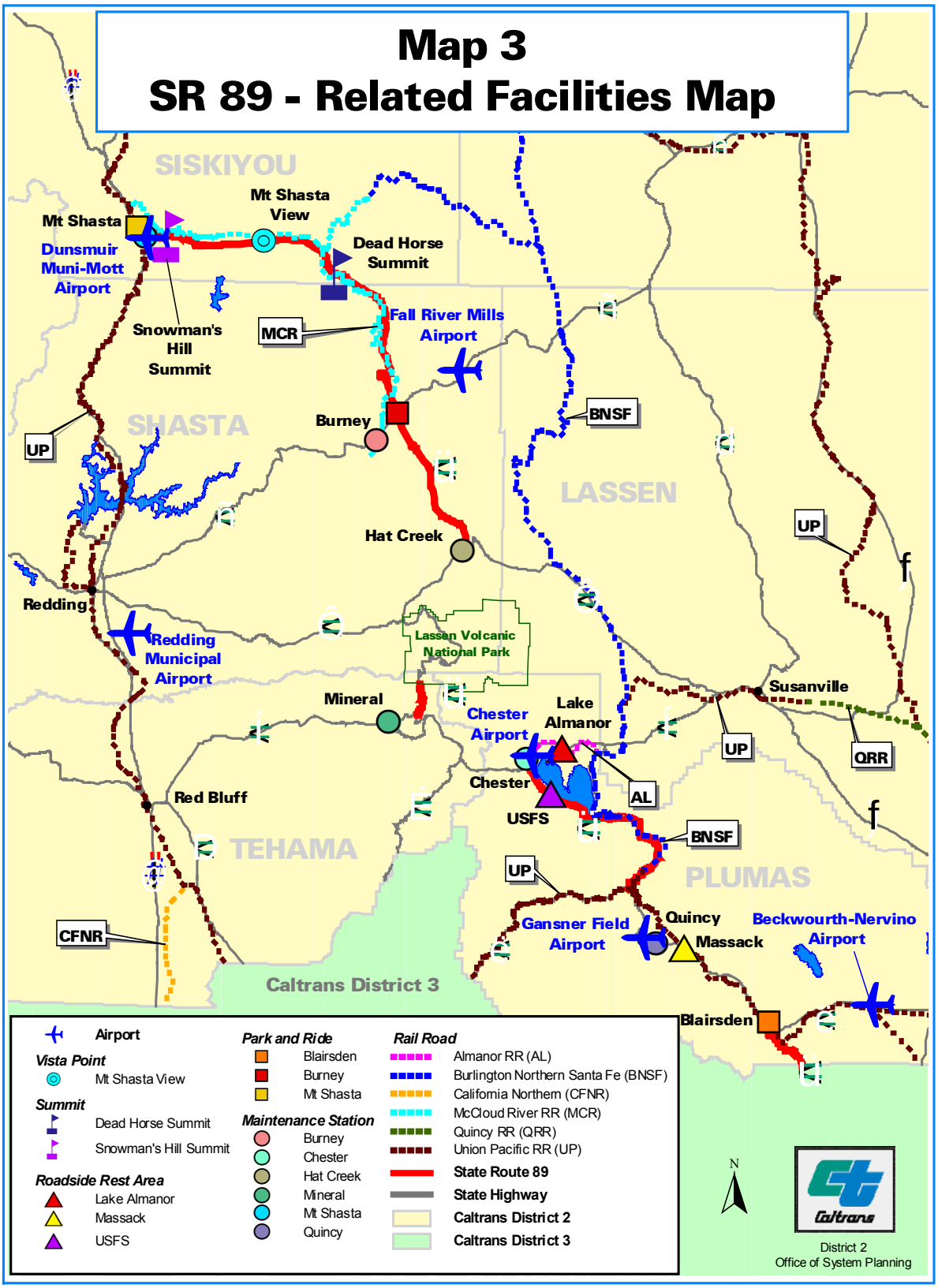
Vista Points are paved areas beyond the shoulder, which permits travelers to safely exit the highway to stop and see a scenic area. In addition to parking areas, trash receptacles, interpretive displays, and in some cases rest rooms, drinking water and telephones may be provided. There is one vista point on SR 89.

County	PM	Location
SIS	15.416	Mt. Shasta View

Park and Ride Lots

Park and Ride Lots are an access mode to transit in which patrons drive private automobiles or ride bicycles to a transit station, stop, or carpool/vanpool waiting area and park the vehicle in the area provided for that purpose. They then ride the transit system or take a carpool or vanpool to their destinations. Other agencies may also operate the Park and Ride Lots.

County	PM	Location	Name of Facility	Operator	Number of Spaces
PLU	66.6	At Junction 70/89 in Blairsden	Blairsden	State	15
SHA	21.6	Four miles east of Burney At Junction 89/299	Burney	USFS/Private Developer	10
SIS	R34.3	At Azalea Road near Mt. Shasta	Mt. Shasta	State	20


Map 3
SR 89 - Related Facilities Map
SISKIYOU
SHASTA
LASSEN
PLUMAS
TEHAMA
Mt Shasta
Mt Shasta View
Dead Horse Summit
Dunsmuir Muni-Mott Airport
Snowman's Hill Summit
MCR
Fall River Mills Airport
Burney
BNSF
UP
Hat Creek
Redding
Redding Municipal Airport
Lassen Volcanic National Park
Mineral
Chester Airport
Lake Almanor
Susanville
QRR
AL
Chester
USFS
Red Bluff
CFNR
Gansner Field Airport
Quincy
Massack
Beckwourth-Nervino Airport
Blairsden
Caltrans District 3
Airport
Vista Point
Mt Shasta View
Summit
Dead Horse Summit
Snowman's Hill Summit
Roadside Rest Area
Lake Almanor
Massack
USFS
Park and Ride
Blairsden
Burney
Mt Shasta
Maintenance Station
Burney
Chester
Hat Creek
Mineral
Mt Shasta
Quincy
Rail Road
Almanor RR (AL)
Burlington Northern Santa Fe (BNSF)
California Northern (CFNR)
McCloud River RR (MCR)
Quincy RR (QRR)
Union Pacific RR (UP)
State Route 89
State Highway
Caltrans District 2
Caltrans District 3
N
Caltrans
District 2
Office of System Planning

Intelligent Transportation Systems

Intelligent Transportation Systems (ITS) apply advanced communication, information and electronics technology to solve existing transportation problems. ITS technologies often offer the potential to improve safety and efficiency relatively quickly and at a reasonable cost. A number of conditions on SR 89 lend themselves to ITS applications:

- mix of users (rural and urban travelers)-many unfamiliar with the route
- steep grades, two summits, curves, limited passing opportunities
- large variance in travel speeds (frequent passing)
- long distances between services
- fewer convenient detour options (alternate routes)
- adverse road surface and weather conditions
- few navigational signs
- less existing infrastructure (per square mile)
- light usage/large geographical areas impeding rapid emergency detection/response

Some of the ITS technologies that may be appropriate for SR 89 include Closed Circuit Televisions (CCTV), Roadway Weather Information Systems (RWIS), Changeable Message Signs (CMS) and Highway Advisory Radios (HAR). CCTV and RWIS are used as surveillance and traveler information devices for monitoring road and weather conditions. CMS and HAR provide information to the driver who can then make the decisions necessary to have a safe and efficient trip.

There are existing ITS facilities along SR 89: RWIS near Snowman's Hill Summit and HAR at the SR 89/SR 299 Junction. CCTVs are also programmed at these locations, as well as the Junction of I-5/SR 89 and SR 70/SR 89. Additional ITS projects are proposed along and/or near the route, and information on these specific projects are provided in the Segment Fact Sheets.

SR 89 is also listed as a highway in Rural COATS Project. District 2 has developed a partnership with District 1 (Eureka) and the Oregon Department of Transportation (ODOT) in the planning and deployment of ITS solutions through the Rural COATS Project (California Oregon Advanced Transportation Systems). The Rural COATS Project includes use of ITS technologies such as CCTV, RWIS, CMS and HAR.

Coordination with other Plans

During preparation of the TCR, local and regional planning documents were reviewed. These documents include city and county general plans, Regional Transportation Plans, resource management plans, traffic studies and other related documents. Specific plans reviewed for the SR 89 TCR are listed in ***Appendix E***.

Preparation of the TCR also involved review of relevant transportation plans from other districts and states. These documents include TCRs of adjoining Department of Transportation Districts, statewide planning tools (ITMS, CTIS, CTIPS, etc.) and route/corridor studies from adjoining states. An abstract of documents utilized is provided in ***Appendix F***.

ROUTE SEGMENTS

For purposes of analysis, highways are divided into smaller pieces called segments. Each segment selected has one or more characteristics that distinguish it from other segments. Information that is obtained and/or developed at the segment level includes traffic growth projections, present and future level of service, target (concept) level of service, environmental issues, right-of-way and adjoining land uses. This information is used during assessment of the potential need for operational and capacity improvements, as well as in subsequent development of project initiation documents.

Criteria used in the selection of segments for analysis include:

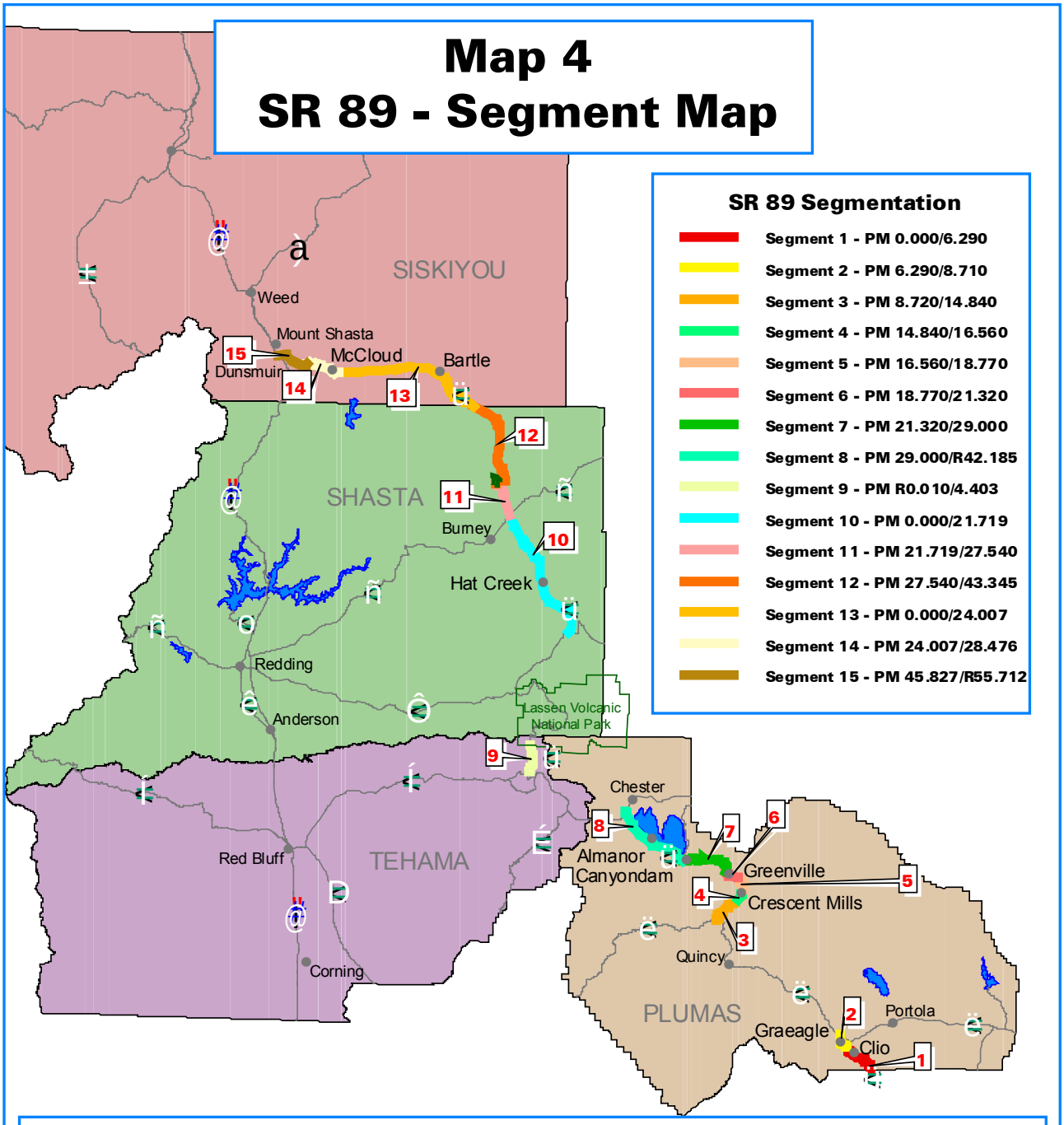
- Change in route concept.
- Change in facility type.
- Change in function or use of route.
- Significant changes in ADT.
- Significant changes in terrain or grade.
- Junction/crossing of other highway or major facility.
- Urban/rural boundaries or other significant change in land use.
- District boundaries
- County/State/national boundaries.

The pages that follow provide a detailed description of each segment. Additional information for each segment (significant land uses, environmental issues, accident data, etc.) is provided in the Segment Fact Sheets. Table 15 provides a summary of the fifteen segments identified for SR 89, while the Segment Map 4 provides a visual representation of the segments.

Table 16: State Route 89 Segments

Segment	County	Pm	Kp	From	To
1	PLU	0.000/6.290	0.000/10.123	Plumas County Line	Frazier Creek Bridge
2	PLU	6.290/8.710	10.123/14.017	Frazier Creek Bridge	Junction SR 89/SR 70
Break in route					
3	PLU	8.720/14.840	14.033/23.882	Junction SR 89/SR 70	County Road A-22
4	PLU	14.840/16.560	23.882/26.654	County Road A-22	Stampfli Lane
5	PLU	16.560/18.770	26.654/30.207	Stampfli Lane	Greenville
6	PLU	18.770/21.320	30.207/34.311	Greenville	Forest Service Road 27N80
7	PLU	21.320/29.800	34.311/46.671	Forest Service Road 27N80	Canyon Dam
8	PLU	29.000/R42.18	46.671/67.890	Canyon Dam	Junction SR 89/SR 36
Break in route					
9	TEH	R0.010/4.403	R0.016/7.086	Tehama County Line (SR 36)	Lassen Volcanic National Park
Break in route					
10	SHA	0.000/21.719	0.000/34.953	Shasta County Line	Junction SR 89/SR 299
11	SHA	21.719/27.540	34.953/44.321	Junction SR 89/SR 299	McArthur-Burney Falls Memorial State Park
12	SHA	27.540/43.345	44.321/69.757	McArthur-Burney Falls Memorial State Park	Shasta County Line
13	SIS	0.000/24.007	0.000/38.636	Siskiyou County Line	McCloud
14	SIS	24.007/28.476	38.636/45.827	McCloud	Mountain House Road
15	SIS	28.476/R34.622	45.827/R55.712	Mountain House Road	Junction SR 89/SR 5

Map 4
SR 89 - Segment Map



Length of State Route 89 by County

County	Length (Miles)
Plumas	42.18
Tehama	4.40
Shasta	43.35
Siskiyou	34.62

N

Caltrans

District 2
Office of System Planning

SEGMENT 1		
PM	KP	Description:
PLU 0.000/6.290	PLU 0.000/10.123	Plumas County Line to Frazier Creek Bridge
Facility Concept: Two-lane conventional highway		

Segment Description/Community Issues:

This segment begins at the Sierra/Plumas County line. This area of Eastern Plumas County allows the driver to enter scenic Mohawk Valley. In this segment, the driver continues to pass through the fresh pine forest first encountered near Lake Tahoe. The forest means wildlife, and the driver needs to watch out for deer or other animals coming onto the roadway.

The road continues through this forest in a narrow, curvilinear pattern until the driver comes upon a few residential developments-Whitehawk Ranch, Valley Ranch Estates and Mohawk Meadows. These developments are nestled into the forest setting. Directly following the residential developments is a grassy meadow with grazing cattle. Traveling through this area, you come to a sharp curve and then County Road A-15. This road allows you to get to the resort community of Gold Mountain and to Portola, the only incorporated city in Plumas County.

After County Road A-15, houses are sporadically placed in the valley setting. Eventually the highway passes through Clio, which offers camping, and lodging. After Clio the highway follows along Sulphur Creek. Eventually the open valley turns into a pine forest again. At this point, a sign on the highway directs travelers to the Lakes Basin Recreation Area. Rich in volcanic rock formations and remains of the gold rush, the Lakes Basin area offers pristine camping, fishing, hiking and mountain biking.

A little further up the highway, a sign directs travelers to another attraction, Gold Lake, Gold Lake Road is not plowed during the winter, making it a popular playground for snowmobilers and cross-country skiers. The segment ends at the Frazier Creek Bridge just south of the community known as Graeagle.

SEGMENT 2		
PM	KP	Description:
PLU 6.290/8.710	PLU 10.123/14.017	Frazier Creek Bridge to Junction 70/89
Facility Concept: Two-lane conventional highway		

Segment Description/Community Issues:

From Frazier Creek Bridge the driver can observe the wonderful scenery of the forest. Shortly afterward the forest gives way to a golf course and residential community known as Graeagle Meadows. During the summer season, Graeagle bustles with locals and tourists shopping in the quaint array of identical red buildings that house gift shops and services. Across from these buildings is the Graeagle Mill Pond, a popular swimming and picnicking site. Serving as the southern gateway to the county, Graeagle has become a popular residential center for both vacation and retirement residents. Elected officials and community leaders have expressed concern that as traffic volumes grow in Graeagle it could affect the quality of life and business activity in the area. Support was expressed for realignment/relocation of SR 89 to the east of town in the future.

Instead of just shopping in the Graeagle village, a driver may want to stop at Plumas-Eureka State Park. This is a 6,700-acre park located six miles from Graeagle on Johnsville Road (County Road A-14) and offers camping and an indoor-outdoor museum of mining equipment.

The small community of Blairsden is located just off SR 89. Blairsden offers a small retail center and includes the nearby Plumas Eureka Estates residential area. The junction of SR 70 is about a quarter of a mile from Blairsden. SR 70 allows for the driver to continue to the communities of Quincy or Portola. It also connects to the continuation of SR 89.

SEGMENT 3		
PM	KP	Description:
PLU 8.720/14.840	PLU 14.033/23.882	Junction 70/89 to County Road A-22
Facility Concept: Two-lane conventional highway		

Segment Description/Community Issues:
After the break in the route with SR 70, SR 89 resumes in the area known an Indian Valley. Indian Creek flows on the east side of the highway throughout this segment, which makes for a very winding drive. The driver can also observe deer and other wildlife in the area. Indian Falls offers a 100-yard trail leading to a favorite local swimming hole on Indian Creek. The segment ends at County Road A-22 (Arlington Road).

SEGMENT 4		
PM	KP	Description:
PLU 14.840/16.560	PLU 23.882/26.654	County Road A-22 to Stampfli Lane
Facility Concept: Two-lane conventional highway		

Segment Description/Community Issues:
The scenic attractions of Indian Valley continue in this segment. The driver may want to turn off at County Road A-22 (Arlington Road). This road passes through the towns of Taylorsville and Genesee before reaching the Antelope Recreation Area.

Crescent Mills is the first community on SR 89 the driver encounters in Indian Valley. Nestled against Indian Valley's western edge, the community features a nine-hole golf course, a bed and breakfast inn, dinnerhouse, deli and a gift shop. Many of these businesses in Crescent Mills front the highway, and drivers need to watch out for pedestrians walking in town and the bicyclists riding in the Class II bicycle lane. Moving out of Crescent Mills, the driver will see the valley dotted with houses, ranches, old barns and grazing cattle. The road becomes narrower as it approaches Stampfli Lane.

SEGMENT 5		
PM	KP	Description:
PLU 16.560/18.770	PLU 26.654/30.207	Stampfli Lane to Greenville
Facility Concept: Two-lane conventional highway		

Segment Description/Community Issues:
This segment is between two communities-Crescent Mills and Greenville. This segment starts at Stampfli Lane. In this area, drivers will notice large fields of agricultural land. The topography soon changes, and becomes mountainous. This mountainous terrain provides habitat in the heavily forested area for deer and other wildlife. A few local roads provide access to residential developments, but the development is limited. At the last part of this segment, the driver drops back down into the valley to the town of Greenville.

SEGMENT 6		
PM	KP	Description:
PLU 18.770/21.320	PLU 30.207/34.311	Greenville to Forest Service Road 27N80
Facility Concept: Two-lane conventional highway		

Segment Description/Community Issues:

At the beginning of the segment, the highway widens and a few residences are apparent. There is an industrial area and valley to the east and a mountain and forest to the west. Along with these areas, there are two tourist attractions-Round Valley Reservoir and a campground/picnic area along Wolf Creek. After the South Greenville Railroad Overhead and Wolf Creek Bridge is the more developed part of Greenville, which is the largest community in Indian Valley.

In the more developed part of the community, the speed limit is lower. A sharp right turn at Hot Springs Road leads you to more residential developments, businesses, a hospital and an industrial park. Central Greenville offers a full range of business and service establishments. The local high school is across from the grocery store, so drivers need to be cautious of students walking across the street to buy lunch or tourists pulling over to take the historic walking tour. The highway narrows as one moves north toward Main Street, and many long time residents will say that the view of Main Street has changed very little since 1857.

Greenville Rancheria can be reached three miles to the east on North Valley Road.

Driving north out of Greenville, a motorist will see additional residential development and campground facilities. The driver is able to drive at a higher speed limit through this forestland.

SEGMENT 7		
PM	KP	Description:
PLU 21.320/29.000	PLU 34.311/46.671	Forest Service Road to Canyon Dam
Facility Concept: Two-lane conventional highway		

Segment Description/Community Issues:

The majority of this segment passes through Plumas National Forest. The drive through the forest provides a feeling of seclusion and tranquility. Wildlife, especially deer, can be seen throughout the segment. The highway is very curvilinear in this segment due to the meandering of Wolf Creek and the rolling terrain. Towards the end of the segment, the highway passes through Wolf Creek Railroad Underpass.

SEGMENT 8		
PM	KP	Description:
PLU 29.800/R42.185	PLU 47.958/67.890	Canyon Dam to Jct SR 89/SR 36
Facility Concept: Two-lane conventional highway		
Traffic Growth Forecast: 3.0%		

Segment Description/Community Issues:

The first part of this segment passes through Canyon Dam. Canyon Dam is the most westerly town of Indian Valley and serves as a gateway to Lake Almanor. The town has a store, post office, motel, and a trailer and RV Park to meet the needs of residents and visitors. Many of these residents and visitors walk near the highway to get to the businesses that front the highway.

Right after the community of Canyon Dam, drivers can turn onto SR 147 to go to Westwood, Susanville or the East Shore of Lake Almanor. After this intersection, both a north and southbound passing lane is available for drivers wanting to pass slower vehicles or trucks. The road is wider at this location which is beneficial for the heavier recreational use. Just north of the junction of SR 147, a site known as Canyon Dam Picnic Area is available for travelers to stop and use the facilities. At the Lake Almanor Spillway, the driver can see the lake and enjoy the scenic beauty of the waterway.

A continuous pattern of trees and brush exist alongside the highway, but they are cut back to provide solar exposure and a better view of animals like deer. The communities/ attractions of Pratville, Almanor, Lake Almanor West and Butt Valley Reservoir can be accessed from this segment. If a driver does not turn off at these locations for services, the next portion of the road offers a stop at an U.S. Forest Service Roadside Rest Area.

Some drivers may also be interested in driving the Humboldt Summit-Humbug Valley Loop off SR 89. This loop is part of a larger road that was originally built to haul supplies from Chico to Idaho, and today many travelers from Butte County take this gravel road to get to Plumas County.

At the junction of SR 89/SR 36, a driver has to make a choice. SR 36 allows the driver to go east three miles to Chester, thirty-one miles to SR 44 or west twenty-seven miles to the point where SR 89 continues on and provides access to Lassen Volcanic National Park.

SEGMENT 9		
PM	KP	Description:
TEH R0.010/4.403	TEH R0.016/7.086	Tehama County Line (SR 36) to Lassen Volcanic National Park Entrance
Facility Concept: Two-lane conventional highway		

Segment Description/Community Issues:

Near Morgan Summit on SR 36, a sign informs you of the junction of SR 36/SR 89. Signs also display the entrance to Volcanic National Park is on SR 89. This four miles stretch of SR 89 is narrow and mountainous. Drivers should watch out for wildlife crossing the roadway.

SR 89 ends at the entrance of Lassen Volcanic National Park. Once through the entrance, the National Forest Service owns the road (Main Park Road) and vehicles are charged a $10 entry fee. The Main Park Road goes twenty-nine miles through the park ending up at SR 44 in Eastern Shasta County. From that point, it is about thirteen miles to SR 89.

Winter brings snow to Morgan Summit, and SR 89 usually remains opened to the park entrance year-round. Heavier snowfall falls in the park, so the Main Park Road is closed usually from October to mid-June.

LASSEN VOLCANIC NATIONAL PARK SEGMENT	
SPECIAL **(Not part of State Highway 89)**	Description: Main Park Road (main park road) in Lassen Volcanic National Park
Facility Concept: Two-lane road	

Segment Description/Community Issues:

Seething sulphur springs, belching mud pots and hissing steam vents are among the wondrous sites awaiting visitors to beautiful Lassen Volcanic National Park. A national park since 1916, Lassen is a treasure of geothermal activity.

There is a fee ($10 in 2002) per vehicle to enter Lassen Volcanic National Park. The Main Park Road takes approximately an hour to drive. The park road is closed from approximately late October to mid-June because of winter conditions, but there is parking and access to the area at both the north and south entrances during the winter.

The Main Park Road, running from the southwest corner of the park to the northwest corner, is a two-lane paved road. This developed road was aligned and constructed subsequent to park designation for the express purpose of providing visitor access to a range of phenomena associated with the eruption of Lassen Peak. The road is narrow and winding, but allows for visitors to pull off and look at the sites.

The following areas can be seen or accessed off the Main Park Road:

- Brokeoff Mountain Trail
- Entrance Station
- Chalet
- Southwest Walk-In Campground
- Sulphur Works
- Bumpass Hell
- Lassen Peak Trail
- Kings Picnic Area
- Summit Lake
- Twin Lakes
- Devastated Area
- Lost Creek Group Campground
- Reflection Lake
- Crags Campground
- Butte Lake & facilities
- Cinder Cone
- Juniper Lake & facilities
- Horseshoe Lake
- Mt. Harkness
- Manzanita Lake & facilities
- Warner Valley & facilities
- NPS/USFS Visitor Center

SEGMENT 10		
PM	KP	Description:
SHA 0.000/21.719	SHA 0.000/34.953	Shasta County Line to Jct SR 89/ SR 299
Facility Concept: Two-lane conventional highway		

Segment Description/Community Issues:

After the break created by Lassen Volcanic National Park, SR 89 begins at SR 44 near Old Station. This portion of Eastern Shasta County is also called the Intermountain area and is primarily forestland. Interspersed in this area are a few campgrounds and a few large cattle ranches.

Also located in this segment is the small community known as Hat Creek. This area is famous for its trout-filled streams, and from the road one can see fishermen in the creek fly-fishing. There are numerous campgrounds in the area and a few local businesses most of which front the highway.

The highway through the remainder of the segment winds up the valley to the area known as "Four Corners." Signs and flashing warning lights alert the driver about the four way stop controlled intersection with SR 299. From this intersection, the driver can take SR 299 east to Alturas or SR 299 west to Burney/Redding.

This segment is part of the SR 89/SR 299 detour for Interstate 5. This segment is a portion of the route proposed for re-designation as a Focus Route.

SEGMENT 11		
PM	KP	Description:
SHA 21.719/27.540	SHA 34.953/44.321	Jct SR 89/299 to McArthur-Burney Falls Memorial State Park
Facility Concept: Two-lane conventional highway		

Segment Description/Community Issues:

From "Four Corners" north on SR 89, the driver sees little change in the scenery. This portion of Shasta County is primarily undeveloped forestland. About two miles in, a driver traverses a railroad crossing. It is still good to be aware of deer and other wildlife in the area.

This segment is part of the SR 89/SR 299 detour for Interstate 5. This segment is a portion of the route proposed for re-designation as a Focus Route.

SEGMENT 12		
PM	KP	Description:
SHA 27.540/43.345	SHA 44.321/69.757	McArthur-Burney Falls Memorial State Park to Siskiyou County Line
Facility Concept: Two-lane conventional highway		

Segment Description/Community Issues:

Only a few minutes away from the community of Burney is McArthur-Burney Falls Memorial State Park. The 564-acre park is along SR 89 and home to one of the most spectacular waterfalls in the world. Many residents from nearby towns visit this attraction for the day. For overnight use, the park also offers 128 campsites.

North of the State Park, the highway alignment is curvy because of the mountainous terrain. The driver encounters another recreational attraction-Lake Britton. The lake has sandy beaches and is enjoyed by swimmers, boaters and campers. The Pacific Crest National Scenic Trail also passes through the park.

North of Lake Britton, the highway passes through a flat valley area with some development in the area. This valley continues from Cayton Creek until County Road A-19. Driving twenty miles north on County Road A-19 allows a driver to arrive in the communities of Dana and McArthur. The segment continues until it reaches the Siskiyou County line.

This segment is part of the SR 89/SR 299 detour for Interstate 5. This segment is a portion of the route proposed for re-designation as a Focus Route.

SEGMENT 13		
PM	KP	Description:
SIS 0.000/24.007	SIS 0.000/39.636	Siskiyou County Line to McCloud
Facility Concept: Two-lane conventional highway		

Segment Description/Community Issues:

This segment lies between the Siskiyou County line and McCloud. Deadhorse Summit and the community of Bartle are located in this segment. Throughout the segment, drivers will notice the several long dips on the highway. There is a railroad crossing at grade in Bartle. Deer cross the highway frequently at many locations throughout this segment.

For scenic drives, the forest offers many roads to recreational areas like the McCloud River Area managed by the U.S. Forest Service. There are campgrounds available at Edison Creek, Ash Creek, Cattle Camp and Medicine Lake. The view of Mt. Shasta is breathtaking from the Mt. Shasta View Vista Point. Snowmobiling is a popular winter sport at Pilgrim Creek Snowmobile Park.
This segment is part of the SR 89/SR 299 detour for Interstate 5. This segment is a portion of the route proposed for re-designation as a Focus Route.

SEGMENT 14		
PM	KP	Description:
SIS 24.007/28.476	SIS 38.636/45.828	McCloud to Mountain House Road
Facility Concept: Four-lane expressway		

Segment Description/Community Issues:

This segment passes through the community of McCloud. Nestled on the southern slope of majestic Mt. Shasta, McCloud was a previous lumber company town. The railroad was brought into town to provide inexpensive transportation for the timber produced, and the McCloud River Railroad still operates as both a freight and passenger train (Shasta Sunset Dinner Train). The town has several bed and breakfast accommodations, motels and vacation house rentals. A Central Business District sign hangs near Minnesota Avenue-alerting drivers to the historic part of town and numerous quaint shops.

The community of McCloud is split on both sides of the highway. This makes it a challenge for drivers, bicyclists and pedestrians to cross SR 89. The principal intersection in the community is at SR 89 and Broadway. SR 89 to the north of McCloud is mountainous with narrow shoulders, but two short passing lanes are available. The Mt. Shasta Board and Ski Park is the next turnoff. This is also an area of concern for deer crossings.

This segment is part of the SR 89/SR 299 detour for Interstate 5. This segment is a portion of the route proposed for re-designation as a Focus Route.

SEGMENT 15		
PM	KP	Description:
SIS 28.476/R34.622	SIS 45.828/R55.719	Mountain House Road to Jct SR 89/SR 5
Facility Concept: Four-lane expressway		

Segment Description/Community Issues:

This segment is between Snowman's Hill (McCloud Summit) and I-5. The traffic in this segment is a mixture of local, visitor and interregional traffic. A major attraction in this segment is the Mt. Shasta Board & Ski Park, off the highway between Mt. Shasta and McCloud (Ski Park Highway). It offers slopes for everyone from beginners to experts plus a Nordic course for cross-country enthusiasts. Also during the winter, many visitors turn off near McCloud Summit (Snowman's Hill Summit) for sledding and other winter sports in the area. The Mt. Shasta Board & Ski Park remains open after the snow melts with mountain bike riding, rock climbing and concerts. This area experiences sporadic congestion in the winter from Ski Park visitors and motorists parking on the highway shoulders to go sledding. This problem is compounded at times when the Ski Park parking lot is full.

Near the junction of SR 89/I-5 is the town of Mt. Shasta. To get Mt. Shasta, a traveler can take Mt. Shasta Boulevard off SR 89 or enter I-5 and take any of the first three exits.

This segment is part of the SR 89/SR 299 detour for Interstate 5. This segment is a portion of the route proposed for re-designation as a Focus Route.

SEGMENT FACT SHEETS

Format of Fact Sheets

The Segment Fact Sheets that follow provide detailed information for each segment on SR 89. Definitions for vocabulary on the Segment Fact Sheets are found in **Appendix A: Glossary**.

- **Page 1.** Segment location, segment/facility concept, design concept, existing and future LOS, highway information, existing geometrics, system designations, significant land uses and segment description.

- **Page 2.** Methodology for traffic projections, traffic data, segment issues, proposed improvements, environmental issues, air quality and accident data.

- **Page 3.** General maintenance issues, structures, pavement issues, drainage/ hydraulics issues, agreements with local agencies, truck/permit issues, congestion/facility closure, access issues, snow/ice issues, safety/operational issues, Intelligent Transportation Systems and bibliography/special studies.

Implementation of Improvements

A number of projects are proposed on SR 89 over the next twenty years. The proposed projects were identified based on capacity and operational analysis, as well as an extensive public outreach program that included meetings with local and regional agencies and the general public. Implementation of many of the identified improvements will require funding and delivery partnerships between Caltrans and its local and regional partners.

Level of Service (LOS) Summary

Table 16 summarizes existing and future LOS conditions for all fifteen segments of SR 89. Existing conditions reflect 2000 data. The LOS for years 2010 and 2020 does not reflect completion of any proposed projects on SR 89.

Table 17: State Route 89 Level of Service (LOS) Summary						
Segment	**County**	**Pm**	**From/to**	**LOS Year 2000**	**LOS Year 2010**	**LOS Year 2020**
1	PLU	0.000/6.290	Plumas County Line to Frazier Creek Bridge	**B**	**B**	**C**
2	PLU	6.290/8.710	Frazier Creek Bridge to Junction SR 89/SR 70	**C**	**D**	**D**
Break in route						
3	PLU	8.720/14.840	Junction SR 89/SR 70 to County Road A-22	**B**	**C**	**C**
4	PLU	14.840/16.560	County Road A-22 to Stampfli Lane	**B**	**C**	**C**
5	PLU	16.560/18.770	Stampfli Lane to Greenville-NB (D)	**A**	**B**	**B**
			Greenville to Stampfli Lane-SB (U)	**A**	**A**	**B**
6	PLU	18.770/21.320	Greenville to Forest Service Road 27N80	**D**	**D**	**D**
7	PLU	21.320/29.000	Forest Service Road 27N80 to Canyon Dam-NB (U)	**C**	**C**	**C**
			Canyon Dam to Forest Service Road 27N80-SB (D)	**D**	**E**	**E**
8	PLU	29.000/R42.18	Canyon Dam to Junction SR 89/SR 36-NB (U)	**C**	**D**	**D**
			Junction SR 89/SR 36 to Canyon Dam-SB (D)	**C**	**D**	**D**
Break in route						
9	TEH	R0.010/4.403	Tehama County Line (SR 36) to Lassen Volcanic National Park-NB (U)	**A**	**A**	**A**
			Lassen Volcanic National Park to Tehama County Line (SR 36)-SB (D)	**A**	**A**	**A**
Break in route						
10	SHA	0.000/21.719	Shasta County Line to Junction SR 89/SR 299	**B**	**B**	**B**
11	SHA	21.719/27.540	Junction SR 89/SR 299 to McArthur-Burney Falls Memorial State Park	**B**	**C**	**C**
12	SHA	27.540/43.345	McArthur-Burney Falls Memorial State Park to Shasta County Line-NB (U)	**C**	**C**	**D**
			Shasta County Line to McArthur-Burney Falls Memorial State Park-SB (D)	**C**	**C**	**D**
13	SIS	0.000/24.007	Siskiyou County Line to McCloud	**C**	**C**	**C**
14	SIS	24.007/28.476	McCloud to Mountain House Road-NB (U)	**C**	**C**	**C**
			Mountain House Road to McCloud-SB (D)	**C**	**D**	**E**
15	SIS	28.476/R34.622	Mountain House Road to Junction SR 89/SR 5-NB (U)	**C**	**C**	**C**
			Junction SR 89/SR 5 to Mountain House Road-SB (D)	**C**	**D**	**D**

U=Upgrade; D=Downgrade
Note: LOS does not reflect completion of proposed projects. For improved LOS, refer to Fact Sheets.

State Route 89 Segment Fact Sheet

January 2002

Segment: PLU 1 **TCR ID: 089PLU01**

General Information:

Location: Plumas County Line to Frazier Creek Bridge **Length Miles/ Length Kilometers:** 6.290 / 10.123

PM Begin/End: 0.000 \ 6.290 **KP Begin/End:** 0.000 \ 10.123 **Lane Miles/ Lane Kilometers:** 12.580 / 20.246

Facility Concept:

Present: Two-Lane Conventional

Twenty-Year: Two-Lane Conventional

Post Twenty-Year: Two-Lane Conventional

Design Concept:

Typical Section: 12' lane width
4' treated shoulders

Design Speed: 55

Clear Recovery Zone: 20' minimum

Level of Service:

Present LOS: B

20-Year LOS (No Build): C

20-Year LOS (Improved): C

Concept LOS: D

Highway Information:

Grade: N/A

Terrain: Rolling

Development: Rural

Percent Non-Passing: 88

Percent Trucks: 13 (6.1% 5+ axles)

Percent RVs: 7

Peak Period Directional Split: 65/35 (North)

Access Points (per mile): 3

HCM Classification: II

Passing Lane: No

Existing Geometrics:

Average Lane Width L/R (ft): 10.2/10.2

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 4.0/4.0

Average Treated Shoulder Width L/R (ft): 1.5/1.5

General Comments: Traveled way widths range from 9' to 12.' Total shoulder widths range from 2' to 8.' Treated shoulder widths range from 0' to 4.'

System Designations:

Functional Classification: Minor Arterial

NHS:	No	**Terminal Access:**	No
IRRS:	Yes	**Nat Truck Network:**	Yes
High Emph:	No	**STRAHNET:**	No
ITSP Focus:	No	**Bikes Permited:**	Yes
Frwy/Expwy:	No	**Scenic/Historic:**	
Lifeline:	No	No. Eligible for State Scenic and Forest Service Byway.	

Significant Land Uses:

The first third of the segment passes through forestland with limited development. The next third of the segment transitions from forestland to mixed residential, grasslands and agricultural land. The small community of Clio has limited residential, commercial and lodging facilities. The last third of the segment passes through forestland again.
This segment has several large residential developments: Gold Mountain, Whitehawk Ranch and Sierra Highlands. Whitehawk and Gold Mountain are both scheduled for expansion. Many of these residences are second homes. Additionally, Sierra Pacific Industries may trade-out sections of land from timber production zone to residential zoning.

Segment Description and General Comments:

Lane widths and shoulder widths are narrow in this segment. The speed limit is posted at 55, but nine curve warning signs are posted ranging from 15-30. Trees and brush grow close to the highway and growth rates are high. There are a few local roads that connect to the highway.

Methodology for Traffic Projections

Growth Rate: 4.0%. The following factors were considered in developing the traffic growth forecast:
30-year historical AADT Growth Rate: 6%; Regional Transportation Plan (RTP); Recreational/Commute traffic between Graeagle/SR 70 and Reno; Recreational/Second home growth; Recreational attractions in area.

Traffic Data

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2000	1150	2200	190	0.114	47.0	50.1
2010	1610	3080	266	0.160	53.6	49.0
2020	1840	3520	304	0.174	59.4	49.3

Segment Improvements:

Segment Issues:
Treated shoulders widths range from 0 to 4 feet.
Lane widths range from 9 to 12 feet.
High left-turn volumes at Gold Lake Road (NB).
Limited solar exposure.

Improvements to Maintain Concept LOS:
None required.

Major Improvements Programmed:
Realign Curves PM 0.7/2.7
Improve alignment.

Realign County Road A-15/SR 89 Intersection PM 2.7/3.2.
(County/State funded project)
Improve alignment and add left-turn pocket on SR 89.

Replace Bridge (Sulphur Creek) PM 3.2/3.6.
Seismic Retrofit, reduce accumulation of debris and allow for permit loads.

Other Potential Improvements:
Establish four-foot (or greater) treated shoulders to enhance safety and serve bicyclists.
Establish twelve-foot (or greater) lane widths to enhance safety and improve mobility.
Establish twenty-foot clear recovery zone.
Left-turn lane at Gold Lake Road (NB).

Environmental Issues:

Hazardous Sites:

No recorded hazardous sites along this segment.

Recorded Species of Concern Species/State/Federal**:**

Willow Flycatcher/Endangered/None

FEMA Mapped Flood Plains:

Calf-Pasture Creek (PM 2.80/3.00)
Sulphur Creek (PM 3.34/3.45, 3.73/3.80)
Middle Fork Feather River (PM 4.40/4.72, 5.00/5.57, 6.00/6.15)
Frazier Creek (PM 6.28/6.35)

Historical Resources (State Historical):

None at this location.

Air Quality:

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Northern Sierra AQMD

Air Basin: Mountain Counties

Designations:	**State**	**Federal**
PM_{10}	Nonattainment	Unclassified
Ozone		
-8 Hour	Unclassified	Unclassified/Attainment
-1 hour	Unclassified	Unclassified/Attainment

Accident Data:

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 1, 1996-December 31, 2000)

	Fatality	Fatal + Injury	PDO	Total
Actual Accident Rate	.000	1.10	.800	1.90
Statewide Average Accident Rate	.044	1.06	1.006	2.11

General Comments: Snow, icy roadway conditions occur for at least 4 months per year in this area.

General Issues:

Cell coverage is intermittent-mostly lack of reception.

During normal work hours, emergency response is in a timely manner. After work hours, the time is increased from one to one and a half times regular response.

Structures:

Sulpur Creek Bridge 09 0027 (PM 3.40)-Structurally Deficient.

Pavement Issues:

Asphalt concrete section with varying maintenance treatments, such as, chip seals, digouts and thin blankets. Shoulder surface appears to be the same as adjacent road surface.

Maintenance Service Level (MSL) is 3.

Drainage/Hydraulics Issues:

See FEMA Mapped Flood Plains under **Environmental Issues.**
Middle Fork Feather River and Sulpur Creek parallel SR 89 near Clio.

Agreements with Local Agencies:

None.

Truck/Permit Issues:

This segment is posted for less than California Standard Truck.
There are weight and length restrictions along SR 89 in District 3 (south).
Sulphur Creek Bridge (PM 3.40) is structurally deficient for weight.
Structure will be replaced-Construction scheduled 2004.
Bonus Overload Class: Orange
Route Class Length: Red

Congestion/Facility Closure:

No recurring or non-recurring congestion.
If SR 89 is closed in this segment, detour options may include the following routes: SR 49, SR 70, SR 80, SR 395. In case of a closure on these routes, SR 89 may be used as a detour.

Access Issues:

None.

Right-of-Way Information:

PM 0.00/3.00 Prescriptive
PM 3.00/4.00 State Title 100-150'
PM 4.00/4.50 Prescriptive
PM 4.50/5.60 State Title 100-120'
PM 5.60/6.29 Prescriptive

Snow/Ice Issues:

Normally chain control is by signs only.

Intelligent Transportation Systems:

In Use: None at this location.

Programmed: None at this location.

Proposed: None at this location.

Bibliography, Special Studies/Reports:

Plumas County Regional Transportation Plan (RTP), 2000
Plumas County General Plan, 1989
California Fast Facts, CA Department of Tourism, 2001
Economic and Demographic Profile Services, Plumas County, 2001

State Route 89 Segment Fact Sheet

January 2002

Segment: PLU 2 **TCR ID: 089PLU02**

General Information:

Location: Frazier Creek Bridge to Junction SR 89/SR 70 **Length Miles/ Length Kilometers:** 2.420 / 3.895

PM Begin/End: 6.290 \ 8.710 **KP Begin/End:** 10.123 \ 14.017 **Lane Miles/ Lane Kilometers:** 4.840 / 7.790

Facility Concept:

Present: Two-Lane Conventional

Twenty-Year: Two-Lane Conventional

Post Twenty-Year: Two-Lane Conventional

Design Concept:

Typical Section: 12' lane width
4' treated shoulders

Design Speed: 45

Clear Recovery Zone: 20' minimum

Level of Service:

Present LOS: C

20-Year LOS (No Build): D

20-Year LOS (Improved): D

Concept LOS: D

Highway Information:

Grade: N/A

Terrain: Rolling

Development: Rural

Percent Non-Passing: 75

Percent Trucks: 7 (2.7% 5+ axles)

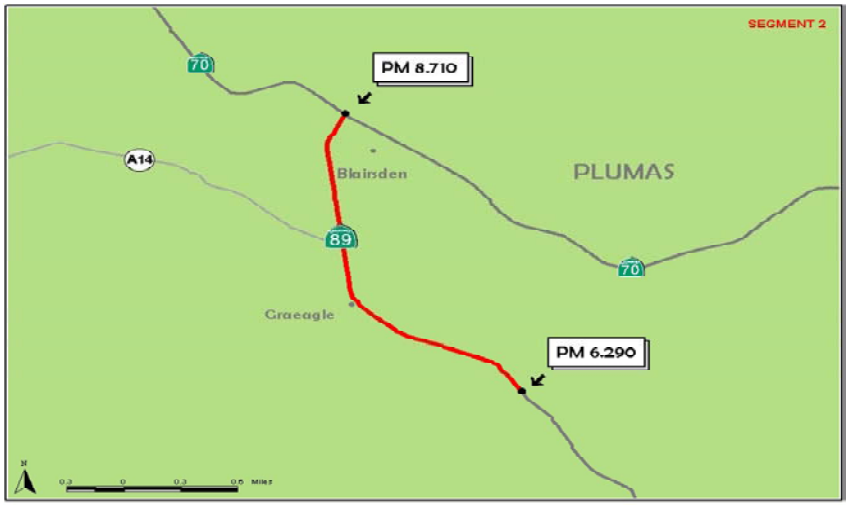
Percent RVs: 4

Peak Period Directional Split: 65/35 (North)

Access Points (per mile): 30

HCM Classification: III

Passing Lane: No



Existing Geometrics:

Average Lane Width L/R (ft): 10.7/10.7

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 6.3/6.0

Average Treated Shoulder Width L/R (ft): 0.80/0.80

General Comments: Traveled way widths range from 9' to 14.' Shoulder widths range from 0' to 10.' Treated shoulder widths range from 0' to 2.'

System Designations:

Functional Classification: Minor Arterial

NHS:	No	**Terminal Access:**	No
IRRS:	Yes	**Nat Truck Network:**	No
High Emph:	No	**STRAHNET:**	No
ITSP Focus:	No	**Bikes Permited:**	Yes
Frwy/Expwy:	No	**Scenic/Historic:**	
Lifeline:	No	Yes-Forest Scenic Byway. Eligible for State Scenic and All American Road.	

Significant Land Uses:

This segment first passes through a golf course and some residential developments. One of the larger residential developments is Graeagle Meadows. The community of Graeagle has a small commercial center and golf course. After Graeagle, there are additional residential and lodging facilities.

Segment Description and General Comments:

Lane widths and shoulder widths are narrow in this segment. The speed limit is posted at the following 45-35-25-50-55. The lower speeds are due to the community of Graeagle in this segment. Graeagle has many driveways and uncontrolled access points. Pedestrian activity is high near the shopping areas in Graeagle.

Methodology for Traffic Projections

Growth Rate: 4.0%. The following factors were considered in developing the traffic growth forecast:
30-year historical AADT Growth Rate: 5.5%; Regional Transportation Plan (RTP); State Route 70 connection; Current and Future Planned Development; Continued Recreational and Commute Traffic Growth.

Traffic Data

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2000	2350	3800	300	0.27	94.06	30.81
2010	3290	5320	420	0.38	95.23	29.16
2020	4230	6840	540	0.44	97.23	28.19

Segment Improvements:

SEGMENT ISSUES:
Treated shoulder widths range 0 to 2 feet.
Lane widths range from 9 to 14 feet.
Lack of sidewalks and bicycle lanes in Graeagle.
Uncontrolled parking and access points.
High left-turn volumes at Blairsden.

MAJOR PROGRAMMED IMPROVEMENTS:
None.

IMPROVEMENTS TO MAINTAIN CONCEPT LOS:
Concept will be maintained through year twenty, however operational improvements should be implemented to enhance highway operation (see **OTHER POTENTIAL IMPROVEMENTS**).
Years 10-20. Conduct planning and feasibility studies for possible highway relocation or realignment or development of parallel local roads.

OTHER POTENTIAL IMPROVEMENTS:
Establish four-foot (or greater) treated shoulders to enhance safety and serve bicyclists.
Establish twelve-foot (or greater) lane widths to enhance safety and improve mobility.
Control and/or consolidate access points on highway (define access points, consider frontage roads).
Establish defined parking areas and sidewalks (would require County sponsorship).
Left-hand turn lane at Blairsden (SB).
Beautification and modernization through Graeagle.
Establish twenty-foot clear recovery zone.

Environmental Issues:

Hazardous Sites:

No recorded hazardous sites along this segment.

Recorded Species of Concern Species/State/Federal**:**

None.

FEMA Mapped Flood Plains:

Frazier Creek (PM 6.28/6.35)
Graeagle Creek (PM 7.25/7.36)
Middle Fork Feather River (PM 7.97/8.34)

Historical Resources (State Historical):

No. 196 Jamison City, Eureka Mills, Johnstown and the Famous Eureka Mine. No. 723 Pioneer Ski Area of America, Johnsville.

Air Quality:

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Northern Sierra AQMD

Air Basin: Mountain Counties

Designations:	**State**	**Federal**
PM_{10}	Nonattainment	Unclassified
Ozone		
-8 Hour	Unclassified	Unclassified/Attainment
-1 hour	Unclassified	Unclassified/Attainment

Accident Data:

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 1, 1996-December 31, 2000)

	Fatality	Fatal + Injury	PDO	Total
Actual Accident Rate	.000	0.46	1.24	1.70
Statewide Average Accident Rate	.041	0.97	.919	1.93

General Comments: Snow, icy roadway conditions occur for at least 4 months per year in this area.

General Issues:

Cell coverage is intermittent-mostly lack of reception.

During normal work hours, emergency response is in a timely manner. After work hours, the time is increased from one to one and a half times regular response.

Structures:

Frazier Creek Bridge 09 0028 (PM 6.290)
Graeagle Creek Bridge 09 0029 (PM 7.290)
Middle Fork Feather River 09 0063 (PM 8.230)
Blairsden UP 09 0031 (PM 8.580)

Pavement Issues:

Asphalt concrete section with varying maintenance treatments, such as, chip seals, digouts and thin blankets. Shoulder surface appears to be the same as adjacent road surface.

Maintenance Service Level (MSL) is 3.

Drainage/Hydraulics Issues:

See FEMA Mapped Flood Plains under **Environmental Issues.** Middle Feather River parallels SR 89 throughout much of the segment.

Agreements with Local Agencies:

None.

Truck/Permit Issues:

This segment is posted for less than California Standard Truck.
Vertical Clearance issue for permit loads at Blairsden UP (PM 8.580).
Bonus Overload Class: Purple
Route Class Length: Red

Congestion/Facility Closure:

Recurring congestion may occur in the community of Graeagle during summer months and special events.
If SR 89 is closed in this segment, detour options may include the following routes: SR 49, SR 70 and SR 395. In case of a closure on these routes, SR 89 may be used as a detour.

Access Issues:

Plumas PM 6.290/8.710 (Graeagle) Access along SR 89 is undefined (unrestricted) through the community. Many building fronts face directly onto the highway. Parking areas are undefined and there are no sidewalks. During the summer travel season, traffic can be slowed or stopped on SR 89 due to vehicles and pedestrians entering and leaving the highway right-of-way.

Right-of-Way Information:

PM 6.29/7.80 Prescriptive
PM 7.80/8.71 State Title 100'

Snow/Ice Issues:

Normally chain control is by signs only.

Intelligent Transportation Systems:

In Use: None at this location.

Programmed: CCTV Near Greenville Wye Jct of SR 70/SR 89

Proposed: None at this location.

Bibliography, Special Studies/Reports:

Plumas County Regional Transportation Plan (RTP), 2000
Plumas County General Plan, 1989
California Fast Facts, CA Department of Tourism, 2001
Economic and Demographic Profile Services, Plumas County, 2001

State Route 89 Segment Fact Sheet

January 2002

Segment: PLU 3 **TCR ID: 089PLU03**

General Information:

Location: Junction SR 70/SR 89 to County Road A-22 **Length Miles/ Length Kilometers:** 6.120 / 9.849

PM Begin/End: 8.720 \ 14.840 **KP Begin/End:** 14.017 \ 23.883 **Lane Miles/ Lane Kilometers:** 12.240 / 19.698

Facility Concept:

Present: Two-Lane Conventional

Twenty-Year: Two-Lane Conventional

Post Twenty-Year: Two-Lane Conventional

Design Concept:

Typical Section: 12' lane width
4' treated shoulders

Design Speed: 55

Clear Recovery Zone: 20' minimum

Level of Service:

Present LOS: B

20-Year LOS (No Build): C

20-Year LOS (Improved): C

Concept LOS: D

Highway Information:

Grade: N/A

Terrain: Rolling

Development: Rural

Percent Non-Passing: 93

Percent Trucks: 11 (7.6% 5+ axles)

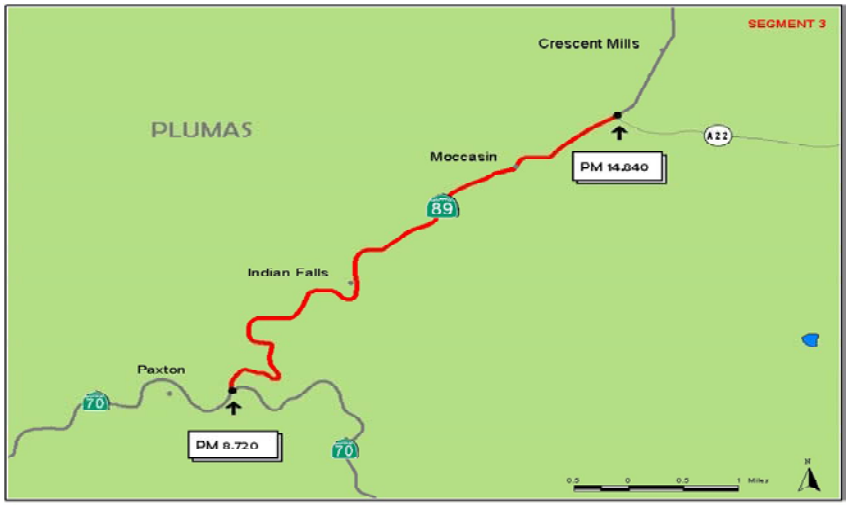
Percent RVs: 6

Peak Period Directional Split: 59/41 (South)

Access Points (per mile): 2

HCM Classification: II

Passing Lane: No



Existing Geometrics:

Average Lane Width L/R (ft): 12.8/12.9

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 0.5/6.4

Average Treated Shoulder Width L/R (ft): 0.00/0.00

General Comments: Traveled way widths range from 11' to 14.' Shoulder widths range from 0' to 8.' Treated shoulder widths are 0.00 feet.

System Designations:

Functional Classification: Minor Arterial

NHS:	No	**Terminal Access:**	Yes
IRRS:	Yes	**Nat Truck Network:**	No
High Emph:	No	**STRAHNET:**	No
ITSP Focus:	No	**Bikes Permited:**	Yes
Frwy/Expwy:	No	**Scenic/Historic:**	
Lifeline:	No	No. Eligible for State Scenic and Forest Service Byway.	

Significant Land Uses:

This segment follows Indian Creek and passes through Plumas National Forest. The creek and forestland are used for recreation. At the end of the segment, some residential development occurs as the forestland transitions into a valley.

Segment Description and General Comments:

Shoulder widths are not consistent throughout this segment. The speed limit is posted at 55, but two curve warning signs are listed at 30 and 40. The curves in this segment are from the highway following Indian Creek. Opportunity for highway expansion is constrained by Indian Creek on the east and canyon walls to the west in many locations.

Methodology for Traffic Projections

Growth Rate: 2.0%. The following factors were considered in developing the traffic growth forecast:
30-year historical AADT Growth Rate: 2%; Regional Transportation Plan (RTP); Opportunity for Recreational Travel (Lake Almanor, Indian Valley, Feather River Canyon); Commute Traffic (Indian Valley/Quincy).

Traffic Data

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2000	2300	3500	240	0.141	51.0	49.3
2010	2760	4200	288	0.166	57.8	49.2
2020	3220	4900	392	0.169	58.7	44.0

Segment Improvements:

SEGMENT ISSUES:
Treated shoulder width is 0 feet.
Lane widths range from 11 to 14 feet.

MAJOR IMPROVEMENTS PROGRAMMED:
Turnouts (PM 9.3/13.9)
Allow passing of slow-moving vehicles.

IMPROVEMENTS TO MAINTAIN CONCEPT LOS:
None required.

OTHER POTENTIAL IMPROVEMENTS:
Establish four-foot (or greater) treated shoulders to enhance safety and serve bicyclists.
Establish twelve-foot (or greater) lane widths to enhance safety and improve mobility.
Establish twenty-foot clear recovery zone.

Environmental Issues:

Hazardous Sites:

No recorded hazardous sites along this segment.

Recorded Species of Concern Species/State/Federal**:**

Webber's Milk-Vetch/None/Species of Concern
Northern Goshawk/None/Species of Concern
Webber's Ivesia/None/Species of Concern

FEMA Mapped Flood Plains:

Indian Creek (PM 14.20/14.90)

Historical Resources (State Historical):

None at this location.

Air Quality:

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Northern Sierra AQMD

Air Basin: Mountain Counties

Designations:	**State**	**Federal**
PM_{10}	Nonattainment	Unclassified
Ozone		
-8 Hour	Unclassified	Unclassified/Attainment
-1 hour	Unclassified	Unclassified/Attainment

Accident Data:

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 1, 1996-December 31, 2000)

	Fatality	Fatal + Injury	PDO	Total
Actual Accident Rate	.040	0.96	0.68	1.68
Statewide Average Accident Rate	.038	0.92	.872	1.83

General Comments: Snow, icy roadway conditions occur for at least 4 months per year in this area.

General Issues:

Cell coverage is intermittent-mostly lack of reception.

During normal work hours, emergency response is in a timely manner. After work hours, the time is increased from one to one and a half times regular response.

Rock Fall area.

Structures:

None.

Pavement Issues:

Asphalt concrete section with varying maintenance treatments, such as, chip seals, digouts and thin blankets. Shoulder surface appears to be the same as adjacent road surface.

Maintenance Service Level (MSL) is 2 at the SR 89/SR 70 Intersection (PM 8.7029) and the remainder of the segment is 3.

Drainage/Hydraulics Issues:

Agreements with Local Agencies:

None.

Truck/Permit Issues:

Route Class Length: Brown
Bonus Overload Class: Purple.

Congestion/Facility Closure:

No recurring or non-recurring congestion.
If SR 89 is closed in this segment, detour options may include the following routes: SR 70 and SR 395. In case of a closure on these routes, SR 89 may be used as a detour.

Access Issues:

None.

Right-of-Way Information:

PM 8.72/13.50 Major portions of this section are on USFS lands with limited title to the right-of-way. 200-300'
PM 13.50/14.84 Major portions of this section are on USFS lands with a special use permit. 80-350'

Snow/Ice Issues:

Normally chain control is by signs only.

Intelligent Transportation Systems:

In Use: None at this location.

Programmed: None at this location.

Proposed: CMS Near SR 89/SR 70 Jct (PM 11.45).
CMS Near SR 70/SR 89 Jct
HAR Near SR 70/SR 89 Jct

Bibliography, Special Studies/Reports:

Plumas County Regional Transportation Plan (RTP), 2000
Plumas County General Plan, 1989
California Fast Facts, CA Department of Tourism, 2001
Economic and Demographic Profile Services, Plumas County, 2001

State Route 89 Segment Fact Sheet

January 2002

Segment: PLU 4 **TCR ID: 089PLU04**

General Information:

Location: County Road A-22 to Stampfli Lane

Length Miles/ Length Kilometers: 1.720 / 2.768

PM Begin/End: 14.840 \ 16.560 **KP Begin/End:** 23.883 \ 26.651 **Lane Miles/ Lane Kilometers:** 3.440 / 5.536

Facility Concept:

Present: Two-Lane Conventional

Twenty-Year: Two-Lane Conventional

Post Twenty-Year: Two-Lane Conventional

Design Concept:

Typical Section: 12' lane width
4' treated shoulders

Design Speed: 55

Clear Recovery Zone: 20' minimum

Level of Service:

Present LOS: B

20-Year LOS (No Build): C

20-Year LOS (Improved): C

Concept LOS: D

Highway Information:

Grade: N/A

Terrain: Rolling

Development: Rural

Percent Non-Passing: 81

Percent Trucks: 9 (5.4% 5+ axles)

Percent RVs: 4

Peak Period Directional Split: 59/41 (South)

Access Points (per mile): 15

HCM Classification: II

Passing Lane: No

Existing Geometrics:

Average Lane Width L/R (ft): 12.5/12.5

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 4.0/9.1

Average Treated Shoulder Width L/R (ft): 1.4/1.4

General Comments: Traveled way widths range from 12' to 13.' Shoulder widths range from 2' to 10.' Treated shoulder widths range from 0' to 8.'

System Designations:

Functional Classification: Minor Arterial

NHS:	No	**Terminal Access:**	Yes
IRRS:	Yes	**Nat Truck Network:**	No
High Emph:	No	**STRAHNET:**	No
ITSP Focus:	No	**Bikes Permited:**	Yes
Frwy/Expwy:	No	**Scenic/Historic:**	
Lifeline:	No	No. Eligible for State Scenic and Forest Service Byway.	

Significant Land Uses:

This segment passes through Indian Valley with some agricultural uses. The small community of Crescent Mills has a mixture of residential, commercial and agricultural land uses.

Segment Description and General Comments:

Shoulder widths are not consistent throughout this segment. The speed is posted at 55-35-55 because of the community of Crescent Mills. Pedestrians and driveways can affect highway operation in Crescent Mills.

Methodology for Traffic Projections

Growth Rate: 2.0%. The following factors were considered in developing the traffic growth forecast:
30-year historical AADT Growth Rate: 2%; Regional Transportation Plan (RTP); Opportunity for Recreational Travel (Lake Almanor, Indian Valley, Feather River Canyon); Commute Traffic (Indian Valley/Quincy).

Traffic Data

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2000	2300	3500	280	0.160	53.6	43.2
2010	2760	4200	336	0.166	57.8	44.0
2020	3220	4900	392	0.172	59.8	44.6

Segment Improvements:

SEGMENT ISSUES:
Treated shoulder widths are 0 to 8 feet.
Lack of sidewalks in Crescent Mills.
High left-turn volumes at County Road A-22 (Arlington Road).

MAJOR IMPROVEMENTS PROGRAMMED:
None.

IMPROVEMENTS TO MAINTAIN CONCEPT LOS:
None required.

OTHER POTENTIAL IMPROVEMENTS:
Establish four-foot (or greater) treated shoulders to enhance safety and serve bicyclists.
Extend Class II bicycle lane to the rest of the segment (including both sides of the highway).
Left turn lane at County Road A-22 (Arlington Road SB).
Environmental constraints and proximity to BNSF railroad tracks, however, may limit the opportunity to develop a cost-effective project.
Establish defined parking areas and sidewalks (would require County sponsorship.)
Beautification and modernization in Crescent Mills.
Park and Ride Lot at County Road A-22 (Arlington Road) (County).
Establish twenty-foot clear recovery zone.

Environmental Issues:

Hazardous Sites:

State Underground Storage Tanks (1)

Recorded Species of Concern Species/State/Federal**:**

Webber's Ivesia/None/Species of Concern

FEMA Mapped Flood Plains:

Indian Creek (PM 14.20/14.90, 16.00/16.31)

Historical Resources (State Historical):

None at this location.

Air Quality:

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Northern Sierra AQMD

Air Basin: Mountain Counties

Designations:	**State**	**Federal**
PM_{10}	Nonattainment	Unclassified
Ozone		
-8 Hour	Unclassified	Unclassified/Attainment
-1 hour	Unclassified	Unclassified/Attainment

Accident Data:

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 1, 1996-December 31, 2000)

	Fatality	Fatal + Injury	PDO	Total
Actual Accident Rate	.000	0.77	0.38	1.15
Statewide Average Accident Rate	.032	0.69	.718	1.44

General Comments: Snow, icy roadway conditions occur for at least 4 months per year in this area.

General Issues:

Cell coverage is intermittent-mostly lack of reception.

During normal work hours, emergency response is in a timely manner. After work hours, the time is increased from one to one and a half times regular response.

Structures:

None.

Pavement Issues:

Asphalt concrete section with varying maintenance treatments, such as, chip seals, digouts and thin blankets. Shoulder surface appears to be the same as adjacent road surface.

Maintenance Service Level (MSL) is 3.

Drainage/Hydraulics Issues:

None.

Agreements with Local Agencies:

None.

Truck/Permit Issues:

Bonus Overload Class: Purple.
Route Class Length: Brown.

Congestion/Facility Closure:

No recurring or non-recurring congestion.
If SR 89 is closed in this segment, detour options may include the following routes: SR 70 and SR 395. In case of a closure on these routes, SR 89 may be used as a detour.

Access Issues:

Plumas PM 14.840/16.560 (Crescent Mills). Many building fronts face directly on the highway. The area has undefined access points, sidewalks and parking. A Class II bicycle lane is present.

Right-of-Way Information:

PM 13.50/16.56 Major portions of this section are on USFS lands with a special use permit. 80-350'

Snow/Ice Issues:

Normally chain control is by signs only.

Intelligent Transportation Systems:

In Use: None at this location.

Programmed: None at this location.

Proposed: None at this location.

Bibliography, Special Studies/Reports:

Plumas County Regional Transportation Plan (RTP), 2000
Plumas County General Plan, 1989
California Fast Facts, CA Department of Tourism, 2001
Economic and Demographic Profile Services, Plumas County, 2001

State Route 89 Segment Fact Sheet

January 2002

Segment: PLU 5 **TCR ID: 089PLU05**

General Information:

Location: Stampfli Lane to Greenville

Length Miles/ Length Kilometers: 2.210 / 3.557

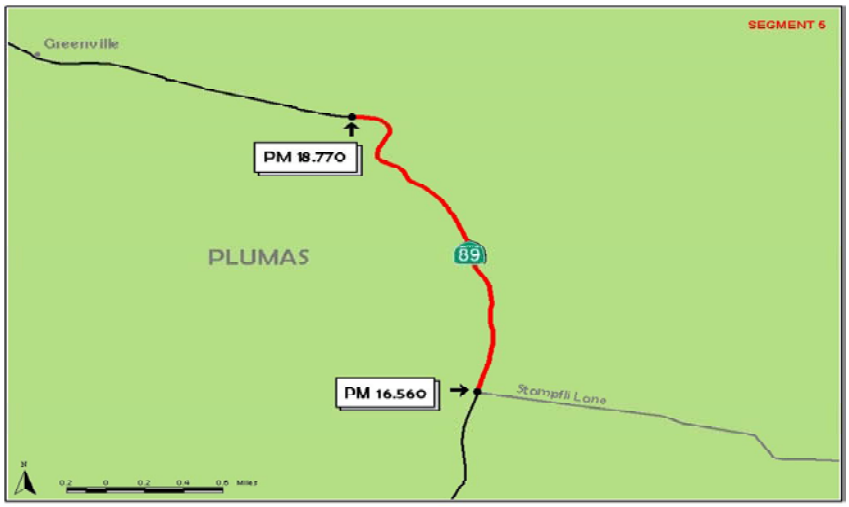
PM Begin/End: 16.560 \ 18.770 **KP Begin/End:** 26.651 \ 30.207 **Lane Miles/ Lane Kilometers:** 4.420 / 7.114

Facility Concept:

Present: Two-Lane Conventional

Twenty-Year: Two-Lane Conventional

Post Twenty-Year: Two-Lane Conventional



Design Concept:

Typical Section: 12' lane width
4' treated shoulders

Design Speed: 55

Clear Recovery Zone: 20' minimum

Level of Service:

Present LOS: A/A (North/South)

20-Year LOS (No Build): B/B (North/South)

20-Year LOS (Improved): B/B (North/South)

Concept LOS: D

Existing Geometrics:

Average Lane Width L/R (ft): 12.3/12.0

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 3.8/6.3

Average Treated Shoulder Width L/R (ft): 1.8/1.8

General Comments: Traveled way widths range from 12' to 15.' Shoulder widths range from 2' to 8.' Treated shoulder widths range from 0' to 3.'

Highway Information:

Grade: 4% (max is 6%)

Terrain: Mountainous

Development: Rural

Percent Non-Passing: 59

Percent Trucks: 9 (5.4% 5+ axles)

Percent RVs: 4

Peak Period Directional Split: 59/41 (South)

Access Points (per mile): 1

HCM Classification: II

Passing Lane: Yes (2)
NB 17.182/18.009
SB 18.516/17.802

System Designations:

Functional Classification: Minor Arterial

NHS:	No	**Terminal Access:**	Yes
IRRS:	Yes	**Nat Truck Network:**	No
High Emph:	No	**STRAHNET:**	No
ITSP Focus:	No	**Bikes Permited:**	Yes
Frwy/Expwy:	No	**Scenic/Historic:**	
Lifeline:	No	No. Eligible for State Scenic and Forest Service Byway.	

Significant Land Uses:

This segment includes the short mountainous area between Greenville and Crescent Mills. The primary land use is forestland, interspersed with limited residential development. This segment ends at the valley prior to the community of Greenville.

Segment Description and General Comments:

Shoulder widths are not consistent throughout this segment. The speed limit is posted at 55, but six curve warning signs are listed at 35. Trees and brush grow close to the highway.

Methodology for Traffic Projections

Growth Rate: 2.0%. The following factors were considered in developing the traffic growth forecast:
30-year historical AADT Growth Rate: 2%; Regional Transportation Plan (RTP); Opportunity for Recreational Travel (Lake Almanor, Indian Valley, Feather River Canyon); Commute Traffic (Indian Valley/Quincy).

Traffic Data

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2000	2300	3500	280	0.15/0.22	37.1/36.7	38.6/43.3
2010	2760	4200	336	0.18/0.26	43.5/40.0.	38.7/42.7
2020	3220	4900	392	0.21/0.31	48.3/41.6	38.2/42.3

Segment Improvements:

SEGMENT ISSUES:
Treated shoulder widths range from 0 to 3 feet.

MAJOR IMPROVEMENTS PROGRAMMED:
Left turn channelization at Stampfli Lane.
Improve site distances and safety at Stampfli Lane.

IMPROVEMENTS TO MAINTAIN CONCEPT LOS:
None required.

OTHER POTENTIAL IMPROVEMENTS:
Establish four-foot (or greater) treated shoulders to enhance safety and serve bicyclists.
Establish twenty-foot clear recovery zone.

Environmental Issues:

Hazardous Sites:

No recorded hazardous sites along this segment.

Recorded Species of Concern Species/State/Federal:

Webber's Ivesia/None/Species of Concern

FEMA Mapped Flood Plains:

None.

Historical Resources (State Historical):

None at this location.

Air Quality:

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Northern Sierra AQMD

Air Basin: Mountain Counties

Designations:	**State**	**Federal**
PM_{10}	Nonattainment	Unclassified
Ozone		
-8 Hour	Unclassified	Unclassified/Attainment
-1 hour	Unclassified	Unclassified/Attainment

Accident Data:

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 1, 1996-December 31, 2000)

	Fatality	Fatal + Injury	PDO	Total
Actual Accident Rate	.000	0.60	0.95	1.55
Statewide Average Accident Rate	.034	0.58	0.29	1.21

General Comments: Snow, icy roadway conditions occur for at least 4 months per year in this area.

General Issues:

Cell coverage is intermittent-mostly lack of reception.

During normal work hours, emergency response is in a timely manner. After work hours, the time is increased from one to one and a half times regular response.

Structures:

None.

Pavement Issues:

Asphalt concrete section with varying maintenance treatments, such as, chip seals, digouts and thin blankets. Shoulder surface appears to be the same as adjacent road surface.

Maintenance Service Level (MSL) is 3.

Drainage/Hydraulics Issues:

None.

Agreements with Local Agencies:

None.

Truck/Permit Issues:

Bonus Overload Class: Purple.
Route Class Length: Brown

Congestion/Facility Closure:

No recurring or non-recurring congestion.
If SR 89 is closed in this segment, detour options may include the following routes: SR 70 and SR 395. In case of a closure on these routes, SR 89 may be used as a detour.

Access Issues:

None.

Right-of-Way Information:

PM 16.56/18.77 Major portions of this section are on USFS lands with a special use permit. 80-350'

Snow/Ice Issues:

Normally chain control is by signs only.

Intelligent Transportation Systems:

In Use: None at this location.

Programmed: None at this location.

Proposed: None at this location.

Bibliography, Special Studies/Reports:

Plumas County Regional Transportation Plan (RTP), 2000
Plumas County General Plan, 1989
California Fast Facts, CA Department of Tourism, 2001
Economic and Demographic Profile Services, Plumas County, 2001

State Route 89 Segment Fact Sheet

January 2002

Segment: PLU 6 **TCR ID: 089PLU06**

General Information:

Location: Greenville to Forest Service Road 27N80

Length Miles/ Length Kilometers: 2.550 / 4.104

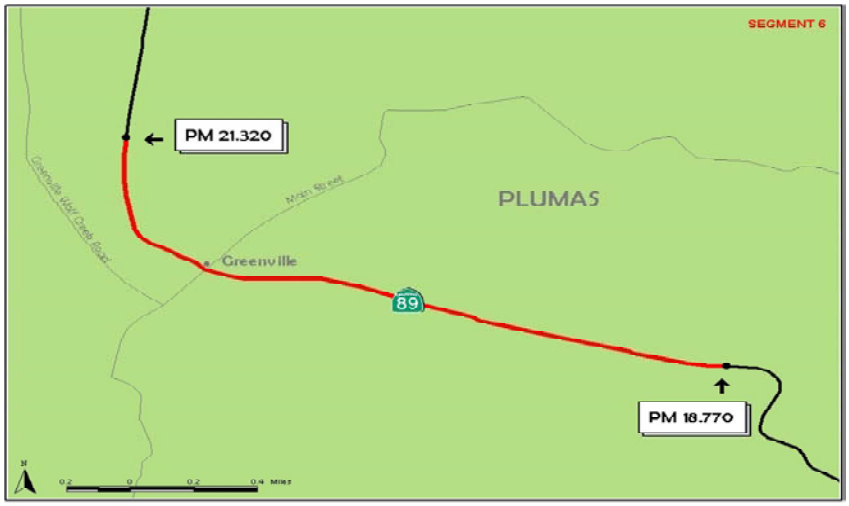
PM Begin/End: 18.770 \ 21.320 **KP Begin/End:** 30.207 \ 34.311 **Lane Miles/ Lane Kilometers:** 5.100 / 8.208

Facility Concept:

Present: Two-Lane Conventional

Twenty-Year: Two-Lane Conventional

Post Twenty-Year: Two-Lane Conventional



Design Concept:

Typical Section: 12' lane width
4' treated shoulders

Design Speed: 45

Clear Recovery Zone: 20' minimum

Level of Service:

Present LOS: D

20-Year LOS (No Build): D

20-Year LOS (Improved): D

Concept LOS: D

Existing Geometrics:

Average Lane Width L/R (ft): 12.3/12.3

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 9.6/8.2

Average Treated Shoulder Width L/R (ft): 5.6/6.4

General Comments: Traveled way widths range from 12' to 13.' Shoulder widths range from 4' to 10.' Treated shoulder widths range from 4' to 10.'

Highway Information:

Grade: N/A

Terrain: Flat

Development: Rural

Percent Non-Passing: 86

Percent Trucks: 9 (5.4% 5+ axles)

Percent RVs: 3

Peak Period Directional Split: 59/41 (South)

Access Points (per mile): 1

HCM Classification: III

Passing Lane: No

System Designations:

Functional Classification: Minor Arterial

NHS:	No	**Terminal Access:**	Yes
IRRS:	Yes	**Nat Truck Network:**	No
High Emph:	No	**STRAHNET:**	No
ITSP Focus:	No	**Bikes Permited:**	Yes
Frwy/Expwy:	No	**Scenic/Historic:**	
Lifeline:	No	No. Eligible for State Scenic and Forest Service Byway.	

Significant Land Uses:

This segment passes through a valley with residential development and then continues to the small community of Greenville. Greenville has a mixture of residential, commercial and industrial development. On the last portion of this segment, there are some developed campgrounds as you approach Plumas National Forest.
Greenville has some potential for residential growth and development at the industrial park. Successful reorganization of the water system and development of sanitary sewer system would also provide additional opportunity for growth.

Segment Description and General Comments:

Shoulder widths are not consistent throughout the segment. The speed limit is posted at the following 55-45-35-25-35-55. The different speeds are because of the community of Greenville. Sporadic congestion occurs in Greenville during the summer due to heavy recreational traffic. Pedestrian activity is high in the main part of Greenville.

Methodology for Traffic Projections

Growth Rate: 2.5%. The following factors were considered in developing the traffic growth forecast:
30-year historical AADT Growth Rate: 1%; Regional Transportation Plan (RTP); Developed Community; Future Recreational and Commercial Growth; Removal of Constraints (water and sewer system repairs); Commute Traffic (Indian Valley/Quincy).

Traffic Data

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2000	3800	5700	440	0.37	94.29	29.51
2010	4750	7125	550	0.45	97.10	28.20
2020	5700	8550	660	0.54	99.25	26.69

Segment Improvements:

SEGMENT ISSUES:
Hot Springs Road/SR 89 intersection (skewed approach and proximity to Wolf Creek Bridge affect site distance from Hot Springs Road).
Proximity of buildings and parking to SR 89/Main intersection can affect intersection operation during peak periods.
Inconsistent sidewalk and parking configurations along SR 89 near Main Street in Greenville.
Drainage and snow removal in Central Greenville.

MAJOR IMPROVEMENTS PROGRAMMED:
None.

IMPROVEMENTS TO MAINTAIN CONCEPT LOS:
Years 10-20. Conduct planning and feasibility studies for operational improvements.

OTHER POTENTIAL IMPROVEMENTS:
Additional county road access through the industrial park to the hospital and Hot Springs Road (Potential County Project).
Central Greenville Beautification and Drainage Project (Potential County/State partnership-requires that water/sewer system reorganization and improvements are completed).
Beautification and Modernization through Greenville.
Pedestrian improvements and/or traffic control at SR 89/Main Street.
Rest Area at Hideaway Road suggested by community (County).
Establish twenty-foot clear recovery zone.

Environmental Issues:

Hazardous Sites:

13 sites on one or more state listings.

Recorded Species of Concern Species/State/Federal**:**

Webber's Ivesia/None/Species of Concern

FEMA Mapped Flood Plains:

Wolf Creek (PM 19.90/20.10, 20.80/21.13)

Historical Resources (State Historical):

No. 184 Peter Lassen Marker (Site of Lassen Trading Post)

Air Quality:

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Northern Sierra AQMD

Air Basin: Mountain Counties

Designations:	**State**	**Federal**
PM_{10}	Nonattainment	Unclassified
Ozone		
-8 Hour	Unclassified	Unclassified/Attainment
-1 hour	Unclassified	Unclassified/Attainment

Accident Data:

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 1, 1996-December 31, 2000)

	Fatality	Fatal + Injury	PDO	Total
Actual Accident Rate	.000	0.45	0.59	1.04
Statewide Average Accident Rate	.041	0.57	.549	1.16

General Comments: Snow, icy roadway conditions occur for at least 4 months per year in this area.

General Issues:

Cell coverage is intermittent-mostly lack of reception.

During normal work hours, emergency response is in a timely manner. After work hours, the time is increased from one to one and a half times regular response.

Structures:

South Greenville Overhead 09 0039 (PM 19.900)
Wolf Creek Bridge 09 0040 (PM 20.010)

Pavement Issues:

Asphalt concrete section with varying maintenance treatments, such as, chip seals, digouts and thin blankets. Shoulder surface appears to be the same as adjacent road surface.

Maintenance Service Level (MSL) is 3.

Drainage/Hydraulics Issues:

See FEMA Mapped Flood Plains under **Environmental Issues.** Wolf Creek parallels SR 89 throughout much of the segment. During the winter season, Wolf Creek deposits large quantities of material that could cause the stream to shift toward SR 89.
Inadequate drainage systems on SR 89 and county roads in Central Greenville.

Agreements with Local Agencies:

None.

Truck/Permit Issues:

Bonus Overload Class: Purple.
Route Class Length: Brown

Congestion/Facility Closure:

Recurring congestion may occur in Greenville during the summer months and during special events.
If SR 89 is closed in this segment, detour options may include the following routes: SR 36, SR 70 and SR 147. In case of a closure on these routes, SR 89 may be used as a detour.

Access Issues:

Plumas PM 18.770/21.320 (Greenville). Many buildings front directly onto the highway. Multiple driveways and cross streets enter onto the highway.

Right-of-Way Information:

PM 18.77/21.32 Major portions of this section are on USFS lands with a special use permit. 80-350'

Snow/Ice Issues:

Normally chain control is by signs only.

Lack of snow storage areas in Central Greenville.

Intelligent Transportation Systems:

In Use: None at this location.

Programmed: None at this location.

Proposed: None at this location.

Bibliography, Special Studies/Reports:

Plumas County Regional Transportation Plan (RTP), 2000
Plumas County General Plan, 1989
California Fast Facts, CA Department of Tourism, 2001
Economic and Demographic Profile Services, Plumas County, 2001

State Route 89 Segment Fact Sheet

January 2002

Segment: PLU 7 **TCR ID: 089PLU07**

General Information:

Location: Forest Service Road 27N80 to Canyon Dam

Length Miles/ Length Kilometers: 7.68 / 12.359

PM Begin/End: 21.320 \ 29.000 **KP Begin/End:** 34.311 \ 46.671 **Lane Miles/ Lane Kilometers:** 15.360 / 24.718

Facility Concept:

Present: Two-Lane Conventional

Twenty-Year: Two-Lane Conventional

Post Twenty-Year: Two-Lane Conventional

Design Concept:

Typical Section: 12' lane width
4' treated shoulders

Design Speed: 55

Clear Recovery Zone: 20' minimum

Level of Service:

Present LOS: C/D (North/South)

20-Year LOS (No Build): D/E (North/South)

20-Year LOS (Improved): C/D (North/South)

Concept LOS: D

Highway Information:

Grade: N/A

Terrain: Rolling

Development: Rural

Percent Non-Passing: 93

Percent Trucks: 11 (3.5% 5+ axles)

Percent RVs: 3

Peak Period Directional Split: 59/41 (South)

Access Points (per mile): 30

HCM Classification: II

Passing Lane: Yes (1)
NB 24.9/25.8

Existing Geometrics:

Average Lane Width L/R (ft): 13.0/12.7

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 4.7/4.8

Average Treated Shoulder Width L/R (ft): 0.0/0.0

General Comments: Traveled way widths range from 12' to 13.' Shoulder widths range from 4' to 8.' Treated shoulder widths are 0.0 feet.

System Designations:

Functional Classification: Minor Arterial

NHS:	No	**Terminal Access:**	Yes
IRRS:	Yes	**Nat Truck Network:**	No
High Emph:	No	**STRAHNET:**	No
ITSP Focus:	No	**Bikes Permited:**	Yes; Class II
Frwy/Expwy:	No	**Scenic/Historic:**	
Lifeline:	No	No. Eligible for State Scenic and Forest Service Byway.	

Significant Land Uses:

None (Forest).

Segment Description and General Comments:

Forestland continues throughout this whole segment. This segment ends approaching Canyon Dam.

Methodology for Traffic Projections

Growth Rate: 2.0%. The following factors were considered in developing the traffic growth forecast:
30-year historical AADT Growth Rate: 2%; Regional Transportation Plan (RTP); Limited Development Potential; Recreation and Commute Traffic.

Traffic Data

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2000	2050	4600	360	0.16/0.20	63.6/84.3	50.7/49.8
2010	2665	5980	468	0.18/0.22	64.6/86.7	50.5/49.1
2020	3280	7360	576	0.19/0.27	68.1/91.4	50.2/48.4

Segment Improvements:

SEGMENT ISSUES:
Treated shoulder width is 0 feet.
Wolf Creek Underpass is at minimum standard for vertical clearance (14 feet 1 inch) with a horizontal clearance of 21 feet.

MAJOR IMPROVEMENTS PROGRAMMED:
Drainage capacity improvements (Sheep Creek).
Increase capacity of culverts.

IMPROVEMENTS TO MAINTAIN CONCEPT LOS:
Year 0-10. Add southbound passing lane.

OTHER POTENTIAL IMPROVEMENTS:
Establish four-foot (or greater) treated shoulders to enhance safety and serve bicyclists.
Improve clearances on Wolf Creek Underpass to facilitate goods movement.
Establish twenty-foot clear recovery zone.

Environmental Issues:

Hazardous Sites:

16 sites on one or more state listings.

Recorded Species of Concern Species/State/Federal**:**

Webber's Ivesia/None/Species of Concern

FEMA Mapped Flood Plains:

Wolf Creek (PM 22.53/22.57, 23.30/23.50, 24.18/24.48)

Historical Resources (State Historical):

None at this location.

Air Quality:

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Northern Sierra AQMD

Air Basin: Mountain Counties

Designations:	**State**	**Federal**
PM_{10}	Nonattainment	Unclassified
Ozone		
-8 Hour	Unclassified	Unclassified/Attainment
-1 hour	Unclassified	Unclassified/Attainment

Accident Data:

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 1, 1996-December 31, 2000)

	Fatality	Fatal + Injury	PDO	Total
Actual Accident Rate	.000	0.58	.700	1.28
Statewide Average Accident Rate	.036	0.49	.444	0.97

General Comments: Snow, icy roadway conditions occur for at least 4 months per year in this area.

General Issues:

Cell coverage is intermittent-mostly lack of reception.

During normal work hours, emergency response is in a timely manner. After work hours, the time is increased from one to one and a half times regular response.

Structures:

Wolf Creek R/R UP 09 0043 (PM 27.360)-Height at minimum clearance standards.

Pavement Issues:

Asphalt concrete section with varying maintenance treatments, such as, chip seals, digouts and thin blankets. Shoulder surface appears to be the same as adjacent road surface.

Maintenance Service Level (MSL) is 3.

Drainage/Hydraulics Issues:

See FEMA Mapped Flood Plains under **Environmental Issues.** Wolf Creek parallels SR 89 throughout much of the segment. During the winter season, Wolf Creek deposits large quantities of material that could cause the stream to shift toward SR 89.

Agreements with Local Agencies:

None.

Truck/Permit Issues:

Vertical Clearance issue at Wolf Creek RR Overcrossing (PM 27.360)-14'1" Overheight loads are routed on SR 36 via Susanville.
Bonus Overload Class: Purple.
Route Class Length: Brown.

Congestion/Facility Closure:

During the next 10 years, it is anticipated congestion will occur in the southbound direction.
If SR 89 is closed in this segment, detour options may include the following routes: SR 36, SR 70 and SR 147. In case of a closure on these routes, SR 89 may be used as a detour.

Access Issues:

None.

Right-of-Way Information:

PM 21.32/29.50 Major portions of this section are on USFS lands with a special use permit. 80-350'
PM 29.50/29.80 With Access Control 100-400'

Snow/Ice Issues:

Normally chain control is by signs only.

Intelligent Transportation Systems:

In Use: None at this location.

Programmed: None at this location.

Proposed: None at this location.

Bibliography, Special Studies/Reports:

Plumas County Regional Transportation Plan (RTP), 2000
Plumas County General Plan, 1989
California Fast Facts, CA Department of Tourism, 2001
Economic and Demographic Profile Services, Plumas County, 2001

State Route 89 Segment Fact Sheet

January 2002

Segment: PLU 8 **TCR ID: 089PLU08**

General Information:

Location: Canyon Dam to Junction SR 89/SR 36 **Length Miles/ Length Kilometers:** 13.185 / 21.235

PM Begin/End: 29.000 \ R42.185 **KP Begin/End:** 46.671 \ R67.890 **Lane Miles/ Lane Kilometers:** 26.370 / 42.470

Facility Concept:

Present: Two-Lane Expressway

Twenty-Year: Two-Lane Expressway

Post Twenty-Year: Two-Lane Expressway

Design Concept:

Typical Section: 12' lane width
4' treated shoulders

Design Speed: 55

Clear Recovery Zone: 30' minimum

Level of Service:

Present LOS: C/C (North/South)

20-Year LOS (No Build): D/D (North/South)

20-Year LOS (Improved): D/D (North/South)

Concept LOS: D

Highway Information:

Grade: N/A

Terrain: Rolling

Development: Rural

Percent Non-Passing: 41

Percent Trucks: 10 (5.6% 5+ axles)

Percent RVs: 3

Peak Period Directional Split: 59/41 (South)

Access Points (per mile): 4

HCM Classification: II

Passing Lane: Yes (2)
NB 38.11/39.11
SB 39.24/38.50

Existing Geometrics:

Average Lane Width L/R (ft): 11.6/11.6

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 7.2/7.3

Average Treated Shoulder Width L/R (ft): 5.1/5.6

General Comments: Traveled way widths range from 12' to 14.' Shoulder widths range from 4' to 9.' Treated shoulder widths range from 0' to 8.'

System Designations:

Functional Classification: Minor Arterial

NHS:	No	**Terminal Access:**	Yes
IRRS:	Yes	**Nat Truck Network:**	No
High Emph:	No	**STRAHNET:**	No
ITSP Focus:	No	**Bikes Permited:**	Yes
Frwy/Expwy:	Yes	**Scenic/Historic:**	
Lifeline:	No	No. Eligible for State Scenic and Forest Service Byway.	

Significant Land Uses:

The segment begins at Canyon Dam which has residential and commercial land uses. After Canyon Dam, the segment passes through forestland. This forestland is used for recreation with Lake Almanor being the major attraction. Many campgrounds are found in this segment. This segment ends at the intersection of SR 89/ SR 36.
There is significant development occurring and planned to the east of SR 89, along SR 147, Plumas County Road A-13 and Lassen County Road A-21. These developments include Walker Ranch and Bailey Creek. Dyer Mountain is a luxury ski-resort planned in Lassen County with access from this location.

Segment Description and General Comments:

Lane widths are narrow throughout this segment. The speed is posted at 45-55-65-55 because of the community of Canyon Dam and the recreational facilities near Lake Almanor. Trees and brush are close to the roadway.

Methodology for Traffic Projections

Growth Rate: 3.0%. The following factors were considered in developing the traffic growth forecast:
30-year historical AADT Growth Rate: 7.5%; Regional Transportation Plan (RTP); Limited Development Potential on SR 89 but significant actual and potential growth to the east (Lake Almanor).

Traffic Data

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2000	1950	3950	360	0.16/0.20	60.8/62.6	52.4/52.4
2010	2535	5135	468	0.18/0.22	65.4/66.6	52.2/51.9
2020	3120	6320	576	0.22/0.23	66.7/65.8	51.3/51.3

Segment Improvements:

SEGMENT ISSUES:
Treated shoulder width ranges from 0 to 8 feet.
High left-turn volumes at SR 89/SR 147 Intersection (SB).

MAJOR IMPROVEMENTS PROGRAMMED:
None.

IMPROVEMENTS TO MAINTAIN CONCEPT LOS:
Years 10-20. Add northbound and southbound passing lanes.

OTHER POTENTIAL IMPROVEMENTS:
Establish four-foot (or greater) treated shoulders to enhance safety and serve bicyclists.
Establish twelve-foot (or greater) lane widths to enhance safety and improve mobility.
Lake Almanor Welcome Center-upgrade USFS rest area.
Left turn lane at SR 89/SR 147 Intersection (SB).
Establish thirty-foot clear recovery zone.

Environmental Issues:

Hazardous Sites:

15 sites on one or more state listings.

Recorded Species of Concern Species/State/Federal:

Bald Eagle/Threatened/Endangered
Suksdorf's Milk-Vetch/Species of Concern/None
Northern Goshawk/Species of Concern/None
Sierra Nevada Red Fox/Species of Concern/Threatened

FEMA Mapped Flood Plains:

Lake Almanor (PM 31.32/31.43)
North Fork Feather River Canyon (PM 41.5/42.1)

Historical Resources (State Historical):

None at this location.

Air Quality:

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Northern Sierra AQMD

Air Basin: Mountain Counties

Designations:	State	Federal
PM_{10}	Nonattainment	Unclassified
Ozone		
-8 Hour	Unclassified	Unclassified/Attainment
-1 hour	Unclassified	Unclassified/Attainment

Accident Data:

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 1, 1996-December 31, 2000)

	Fatality	Fatal + Injury	PDO	Total
Actual Accident Rate	.025	0.23	.295	0.55
Statewide Average Accident Rate	.023	0.28	.297	0.60

General Comments: Snow, icy roadway conditions occur for at least 4 months per year in this area.

General Issues:

Cell coverage is intermittent-mostly lack of reception.
Radio coverage is poor to nonexistent.

During normal work hours, emergency response is in a timely manner. After work hours, the time is increased from one to one and a half times regular response.

Structures:

Lake Almanor Spillway 09 0044 (PM 29.970)

Pavement Issues:

Asphalt concrete section with varying maintenance treatments, such as, chip seals, digouts and thin blankets. Shoulder surface appears to be the same as adjacent road surface.

Maintenance Service Level (MSL) is 3.

Drainage/Hydraulics Issues:

None.

Agreements with Local Agencies:

None.

Truck/Permit Issues:

U.S. Forest Service Roadside Rest Area could be improved-Lake Almanor Welcome Area.
Bonus Overload Class: Purple.
Route Class Length: Brown.

Congestion/Facility Closure:

After 2010, it is anticipated congestion will occur both in the northbound and southbound directions.
If SR 89 is closed in this segment, detour options may include the following routes: SR 32, SR 36, SR 70 and SR 147. In case of a closure on these routes, SR 89 may be used as a detour.

Access Issues:

Access along SR 89 is undefined (unrestricted) through Canyon Dam. The remainder of this segment is expressway with controlled access.

Right-of-Way Information:

PM 29.80/42.185 With Access Control 100-400'

Snow/Ice Issues:

Normally chain control is by signs only.

Intelligent Transportation Systems:

In Use: None at this location.

Programmed: None at this location.

Proposed:
CMS Near Canyon Dam (PM 29.6)
RWIS Near Canyon Dam (PM 29.6)
CMS Jct SR 89/SR 36 Back (PM R41.50)
CMS Just south of Jct with SR 36 (PM R42.00)

Bibliography, Special Studies/Reports:

Plumas County Regional Transportation Plan (RTP), 2000
Plumas County General Plan, 1989
California Fast Facts, CA Department of Tourism, 2001
Economic and Demographic Profile Services, Plumas County, 2001

State Route 89 Segment Fact Sheet

January 2002

Segment: TEH 9 **TCR ID: 089TEH09**

General Information:

Location: Tehama County Line (SR 36) to Lassen Volcanic National Park

Length Miles/ Length Kilometers: 4.393 / 7.070

PM Begin/End: R0.010 \ 4.403 **KP Begin/End:** R0.0161 \ 7.086 **Lane Miles/ Lane Kilometers:** 8.786 / 14.140

Facility Concept:

Present: Two-Lane Conventional

Twenty-Year: Two-Lane Conventional

Post Twenty-Year: Two-Lane Conventional

Design Concept:

Typical Section: 12' lane width
4' treated shoulders

Design Speed: 55

Clear Recovery Zone: 20' minimum

Level of Service:

Present LOS: A/A (North/South)

20-Year LOS (No Build): A/A (North/South)

20-Year LOS (Improved): A/A (North/South)

Concept LOS: D

Highway Information:

Grade: 4% (max is 6%)

Terrain: Mountainous

Development: Rural

Percent Non-Passing: 80

Percent Trucks: 0 (0.0% 5+ axles)

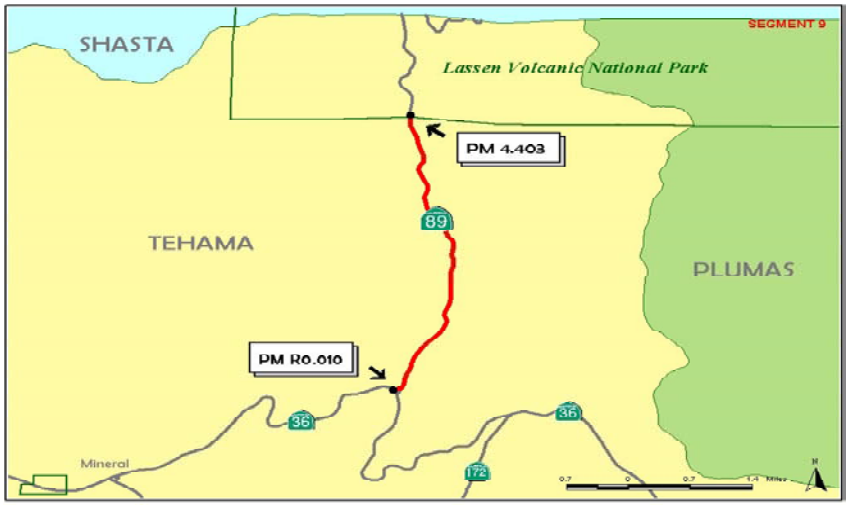
Percent RVs: 0.2

Peak Period Directional Split: 50/50

Access Points (per mile): 1

HCM Classification: II

Passing Lane: No



Existing Geometrics:

Average Lane Width L/R (ft): 11.1/11.1

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 1.9/1.9

Average Treated Shoulder Width L/R (ft): 0.0/0.0

General Comments: Traveled way widths range from 11' to 14.' Shoulder widths range from 0' to 4.' Treated shoulder widths are 0.0 feet.

System Designations:

Functional Classification: Minor Arterial

NHS:	No	**Terminal Access:**	No
IRRS:	Yes	**Nat Truck Network:**	No
High Emph:	No	**STRAHNET:**	No
ITSP Focus:	No	**Bikes Permited:**	Yes
Frwy/Expwy:	No	**Scenic/Historic:**	
Lifeline:	No	Yes-Forest Scenic Byway. Eligible for State Scenic and All American Road.	

Significant Land Uses:

This segment passes through forest and ends at the entrance to Lassen Volcanic National Park. No development possible.

Segment Description and General Comments:

Lane widths and shoulder widths are narrow in this segment. The speed is posted at 55, but curve warning signs are listed at 35. Trees and brush are close to the roadway.

Methodology for Traffic Projections

Growth Rate: 1.0%. The following factors were considered n developing the traffic growth forecast:
30-year historical AADT Growth Rate: 1%; Regional Transportation Plan (RTP); General Management Plan-Lassen Volcanic National Park; US Forest Service Land; Recreational Traffic.

Traffic Data

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2000	430	1150	100	0.05/0.05	27.3/27.3	53.3/53.3
2010	473	1265	110	0.07/0.03	28.5/28.5	53.2/53.2
2020	516	1380	120	0.07/0.03	29.6/29.6	53.1/53.1

Segment Improvements:

SEGMENT ISSUES:
Treated shoulder width is 0 feet.
Lane widths range from 11 to 14 feet.
Limited solar exposure.

MAJOR IMPROVEMENTS PROGRAMMED:
None.

IMPROVEMENTS TO MAINTAIN CONCEPT LOS:
None required.

OTHER POTENTIAL IMPROVEMENTS:
Establish four-foot (or greater) treated shoulders to enhance safety and serve bicyclists.
Establish twelve-foot (or greater) lane widths to enhance safety and improve mobility.
Establish twenty-foot clear recovery zone.

Environmental Issues:

Hazardous Sites:

No recorded hazardous sites along this segment.

Recorded Species of Concern Species/State/Federal**:**

Northern Goshawk/None/Species of Concern

FEMA Mapped Flood Plains:

None.

Historical Resources (State Historical):

None at this location.

Air Quality:

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Tehama County APCD

Air Basin: Sacramento Valley

Designations:	**State**	**Federal**
PM_{10}	Nonattainment	Unclassified
Ozone -8 Hour	Nonattainment	Pending Nonattainment
-1 hour	Nonattainment	Attainment

Accident Data:

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 1, 1996-December 31, 2000)

	Fatality	Fatal + Injury	PDO	Total
Actual Accident Rate	.000	0.55	0.54	1.09
Statewide Average Accident Rate	.053	1.207	1.27	2.53

General Comments: Snow, icy roadway conditions occur for at least 4 months per year in this area.

General Issues:

Cell coverage is intermittent-mostly lack of reception.

During normal work hours, emergency response is in a timely manner. After work hours, the time is increased from one to one and a half times regular response.

High deer population.

Structures:

None.

Pavement Issues:

Asphalt concrete section with varying maintenance treatments, such as, chip seals, digouts and thin blankets. Shoulder surface appears to be the same as adjacent road surface.

Maintenance Service Level (MSL) is 3.

Drainage/Hydraulics Issues:

None.

Agreements with Local Agencies:

None.

Truck/Permit Issues:

Truck Advisory-restrictions are less than 30 feet kingpin to rear axle.
Lassen Volcanic National Park is closed to trucks.
Bonus Overload Class: Purple.
Route Class Length: Brown

Congestion/Facility Closure:

No recurring or non-recurring congestion.
Usually from October to May, the Main Park Road is closed due to winter conditions. SR 89 allows you to get to the main entrance.
If SR 89 is closed in this segment, detour options may include the following routes: SR 36, SR 44 and SR 172. In case of a closure on these routes, SR 89 may be used as a detour.

Access Issues:

None.

Right-of-Way Information:

PM R0.010/4.403 With Access Control 100-400'

Snow/Ice Issues:

Normally chain control is by signs only.

Intelligent Transportation Systems:

In Use: None at this location.

Programmed: None at this location.

Proposed: None at this location.

Bibliography, Special Studies/Reports:

Tehama County Regional Transportation Plan (RTP), 1998
Tehama County General Plan, 1983
California Fast Facts, CA Department of Tourism, 2001
Economic and Demographic Profile Services, Tehama County, 2001
General Management Plan and Environmental Impact Statement-Lassen Volcanic National Park, August 2001

State Route 89 Segment Fact Sheet

January 2002

Segment: SHA 10 **TCR ID: 089SHA10**

General Information:

Location: Shasta County Line to Junction SR 89/SR 299 **Length Miles/ Length Kilometers:** 21.719 / 34.953

PM Begin/End: 0.000 \ 21.719 **KP Begin/End:** 0.000 \ 34.953 **Lane Miles/ Lane Kilometers:** 43.438 / 69.906

Facility Concept:

Present: Two-Lane Conventional

Twenty-Year: Two-Lane Conventional

Post Twenty-Year: Two-Lane Conventional

Design Concept:

Typical Section: 12' lane width
8' treated shoulders

Design Speed: 65

Clear Recovery Zone: 20' minimum

Level of Service:

Present LOS: B

20-Year LOS (No Build): B

20-Year LOS (Improved): B

Concept LOS: D

Highway Information:

Grade: N/A

Terrain: Rolling

Development: Rural

Percent Non-Passing: 48

Percent Trucks: 13 (8.2% 5+ axles)

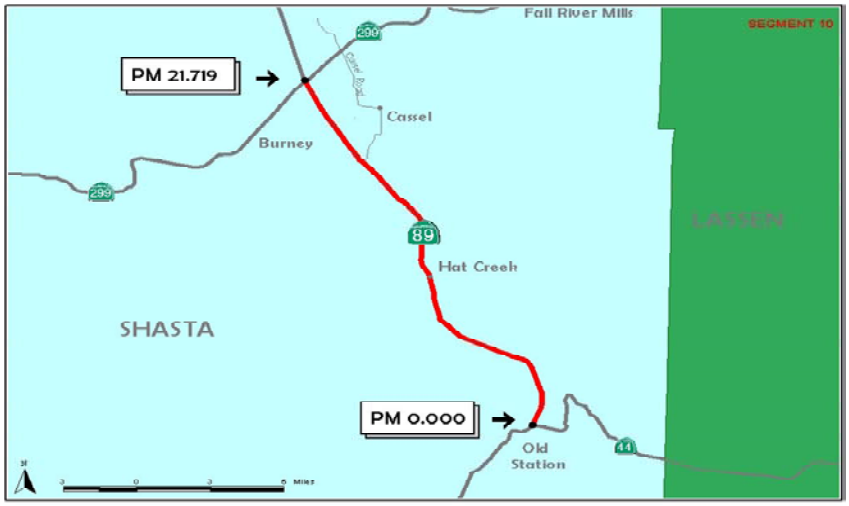
Percent RVs: 3

Peak Period Directional Split: 65/35 (North)

Access Points (per mile): 3

HCM Classification: I

Passing Lane: No



Existing Geometrics:

Average Lane Width L/R (ft): 11.9/11.9

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 4.9/4.9

Average Treated Shoulder Width L/R (ft): 1.7/1.7

General Comments: Traveled way widths range from 11' to 12.' Shoulder widths range from 0' to 10.' Treated shoulder widths range from 0' to 2.'

System Designations:

Functional Classification: Principal Arterial

NHS:	Yes	**Terminal Access:**	Yes
IRRS:	Yes	**Nat Truck Network:**	No
High Emph:	No	**STRAHNET:**	No
ITSP Focus:	No*	**Bikes Permited:**	Yes
Frwy/Expwy:	No	**Scenic/Historic:**	
Lifeline:	No	Yes-Forest Scenic Byway. Eligible for State Scenic and All American Road.	

Significant Land Uses:

This segment passes through forestland. There are several campgrounds and RV parks in this segment. The forestland transitions into a valley that contains agricultural land near the community of Hat Creek. In Hat Creek, there are some residential and commercial developments.

Segment Description and General Comments:

The speed limit is posted at 55 with no curve warning signs. The segment ends at the intersection of SR 89/SR 299.

***This segment is a portion of the route proposed for re-designation as a Focus Route.**

Methodology for Traffic Projections

Growth Rate: 2.0%. The following factors were considered in developing the traffic growth forecast:
30-year historical AADT Growth Rate: 3%; Regional Transportation Plan (RTP); Recreational Traffic; Direct truck and tourist route to Reno.

Traffic Data

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2000	1600	2900	170	0.102	41.3	52.5
2010	1920	3480	204	0.122	44.5	51.5
2020	2240	4060	238	0.143	47.6	51.1

Segment Improvements:

SEGMENT ISSUES:
Treated shoulder widths range from 0 to 2 feet.
Lane widths range from 11 to 12 feet.
High left-turn volumes at Hat Creek Campground Entrance (SB).

MAJOR IMPROVEMENTS PROGRAMMED:
Extend Culverts (Hat Creek Cure PM 0.00/10.9).
Improve roadside clear recovery zone and structural support.

IMPROVEMENTS TO MAINTAIN CONCEPT LOS:
None required.

OTHER POTENTIAL IMPROVEMENTS:
Establish eight-foot treated shoulders to enhance safety and serve bicyclists.
Establish twelve-foot (or greater) lane widths to enhance safety and improve mobility.
Left turn lane at Hat Creek Campground entrance (SB).
Establish twenty-foot clear recovery zone.

Environmental Issues:

Hazardous Sites:

5 sites on one or more state listings.

Recorded Species of Concern Species/State/Federal:

Bald Eagle/Endangered/Threatened
Shasta Crayfish/Endangered/Endangered
Rough Sculpin/Threatened/Species of Concern
Bank Swallow/Threatened/None
Pacific Fisher/None/Species of Concern

FEMA Mapped Flood Plains:

Hat Creek (PM 0.75/1.64, 3.80/3.95, 9.50/9.90, 14.30/14.45, 15.70/16.35)

Historical Resources (State Historical):

None at this location.

Air Quality:

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Shasta County AQMD

Air Basin: Sacramento Valley

Designations:	**State**	**Federal**
PM_{10}	Nonattainment	Unclassified
Ozone		
-8 Hour	Nonattainment	Pending Nonattainment
-1 hour	Nonattainment	Attainment

Accident Data:

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 1, 1996-December 31, 2000)

	Fatality	Fatal + Injury	PDO	Total
Actual Accident Rate	.060	0.79	0.75	1.60
Statewide Average Accident Rate	.037	0.50	.473	1.01

General Comments: Snow, icy roadway conditions occur for at least 4 months per year in this area.

General Issues:

Cell coverage is intermittent-mostly lack of reception.
Radio coverage is poor to nonexistent.
During normal work hours, emergency response is in a timely manner.
After work hours, the time is increased from one to one and a half times regular response.
High deer population.
Open range area.

Structures:

Hat Creek 06 0085 (PM 3.890)
Hat Creek 06 0086 (PM 14.370)
Hat Creek 06 0087 (PM 16.090)

Pavement Issues:

Asphalt concrete section with paved uniform thickness due to a thick blanket overlay project. Shoulder surface is the same as adjacent road surface.

Maintenance Service Level (MSL) is 2.

Drainage/Hydraulics Issues:

See FEMA Mapped Flood Plains under **Environmental Issues.** Hat Creek parallels SR 89 throughout much of the segment.

Agreements with Local Agencies:

None.

Truck/Permit Issues:

Bonus Overload Class: Purple.
Route Class Length: Blue.

Congestion/Facility Closure:

No recurring congestion.
If SR 89 is closed in this segment, detour options may include the following routes: SR 44, SR 139, SR 299 and I-5. In case of a closure on these routes, SR 89 may be used as a detour.
In case of an I-5 closure between Redding & Mt. Shasta, traffic will use a portion of SR 89 & SR 299 as the emergency detour route.
When I-5 is unavailable and SR 89 is the detour, non-recurring congestion may occur.

Access Issues:

Shasta PM 0.000/21.719 (Hat Creek). Multiple access points to businesses and campgrounds.

Right-of-Way Information:

PM 0.00/14.50 Some Prescriptive 100-132'
PM 14.50/21.719 Major portions of this section are on USFS land with a special use permit. 100-200'

Snow/Ice Issues:

Normally chain control is by signs only.

Intelligent Transportation Systems:

In Use: None at this location.

Programmed: None at this location.

Proposed:
CMS Near Jct 44/Jct 89
CCTV Near Hat Creek Ranger Station (PM 11.00)
CMS Near Hat Creek Ranger Station (PM 11.00)
RWIS Near Hat Creek Ranger Station (PM 11.00)

Bibliography, Special Studies/Reports:

Shasta County Regional Transportation Plan (RTP), 1998
Shasta County General Plan, 1995
California Fast Facts, CA Department of Tourism, 2001
Economic and Demographic Profile Services, Shasta County, 2001

State Route 89 Segment Fact Sheet

January 2002

Segment: SHA 11 **TCR ID: 089SHA11**

General Information:

Location: Junction SR 89/299 to McArthur-Burney Falls Memorial State Park

Length Miles/ Length Kilometers: 5.821 / 9.368

PM Begin/End: 21.719 \ 27.540 **KP Begin/End:** 34.953 \ 44.321 **Lane Miles/ Lane Kilometers:** 11.642 / 18.736

Facility Concept:

Present: Two-Lane Conventional

Twenty-Year: Two-Lane Conventional

Post Twenty-Year: Two-Lane Conventional

Design Concept:

Typical Section: 12' lane width
8' treated shoulders

Design Speed: 65

Clear Recovery Zone: 20' minimum

Level of Service:

Present LOS: B

20-Year LOS (No Build): C

20-Year LOS (Improved): C

Concept LOS: D

Existing Geometrics:

Average Lane Width L/R (ft): 11.0/11.0

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 1.4/1.4

Average Treated Shoulder Width L/R (ft): 0.0/0.0

General Comments: Traveled way widths are 11.0 feet. Shoulder widths range from 0' to 2.' Treated shoulder widths are 0.0 feet.

Highway Information:

Grade: N/A

Terrain: Rolling

Development: Rural

Percent Non-Passing: 53

Percent Trucks: 20 (14.3% 5+ axles)

Percent RVs: 4

Peak Period Directional Split: 57/43 (North)

Access Points (per mile): 3

HCM Classification: I

Passing Lane: No

System Designations:

Functional Classification: Principal Arterial

NHS:	Yes	**Terminal Access:**	Yes
IRRS:	Yes	**Nat Truck Network:**	No
High Emph:	No	**STRAHNET:**	No
ITSP Focus:	No*	**Bikes Permited:**	Yes
Frwy/Expwy:	No	**Scenic/Historic:**	
Lifeline:	No	Yes-Forest Scenic Byway. Eligible for State Scenic and All American Road.	

Significant Land Uses:

Some commercial development near the intersection of SR 89/SR 299. After the intersection, the land is primarily forestland. The segment ends at McArthur-Burney Falls Memorial State Park.
Additional commercial development at the junction of SR 89/SR 299 is possible. An industrial site along SR 89, which was formerly a lumber mill, is now being operated as a quarry (Rim Rock Ranch) and is expanding to add an asphalt batch plant.

Segment Description and General Comments:

The speed limit is posted at 65 with no curve warning signs. Trees and brush are close to the roadway. There are a few local roads that connect to the highway.

***This segment is a portion of the route proposed for re-designation as a Focus Route.**

Methodology for Traffic Projections

Growth Rate: 1.5%. The following factors were considered in developing the traffic growth forecast:
30-year historical AADT Growth Rate: 1%; Regional Transportation Plan (RTP); Limited Current and Future Development; Agricultural and Timber Area; Recreational Traffic; Direct truck route and tourist route to Reno.

Traffic Data

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2000	2000	3350	370	0.167	53.9	52.5
2010	2300	3853	426	0.193	57.2	52.0
2020	2600	4355	481	0.217	59.6	51.6

Segment Improvements:

SEGMENT ISSUES:
Treated shoulder width is 0 feet.
Lane width is 11 feet.
Function of a four-way stop control at SR 89/SR 299 intersection should be monitored as traffic volumes grow.

MAJOR IMPROVEMENTS PROGRAMMED:
Replace Bridge and Realign Roadway-Environmental Phase-(Lake Britton Bridge Sha PM 21.7/29.8).
(Bridge replacement, realign approach to bridge, realign and/or upgrade RR crossing, and 8-foot shoulders)

IMPROVEMENTS TO MAINTAIN CONCEPT LOS:
None required.

OTHER POTENTIAL IMPROVEMENTS:
Establish eight-foot treated shoulders to enhance safety and serve bicyclists.
Establish twelve-foot (or greater) lane widths to enhance safety and improve mobility.
Signalize the intersection of SR 89/SR 299 (conventional signal).
Establish twenty-foot clear recovery zone.

Environmental Issues:

Hazardous Sites:

10 sites on one or more state listings.

Recorded Species of Concern Species/State/Federal**:**

Bank Swallow/Threatened/None
Bald Eagle/Endangered/Threatened

FEMA Mapped Flood Plains:

None.

Historical Resources (State Historical):

None at this location.

Air Quality:

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Shasta County AQMD

Air Basin: Sacramento Valley

Designations:	**State**	**Federal**
PM_{10}	Nonattainment	Unclassified
Ozone -8 Hour	Nonattainment	Pending Nonattainment
Ozone -1 hour	Nonattainment	Attainment

Accident Data:

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 1, 1996-December 31, 2000)

	Fatality	Fatal + Injury	PDO	Total
Actual Accident Rate	.048	0.48	.722	1.25
Statewide Average Accident Rate	.036	0.49	.454	0.98

General Comments: Snow, icy roadway conditions occur for at least 4 months per year in this area.

General Issues:

Cell coverage is intermittent-mostly lack of reception.
During normal work hours, emergency response is in a timely manner.
After work hours, the time is increased from one to one and a half times regular response.
High deer population.
Open range area.

Structures:

None.

Pavement Issues:

Asphalt concrete section with varying maintenance treatments, such as, chip seals, digouts and thin blankets. Shoulder surface appears to be the same as adjacent road surface.

Maintenance Service Level (MSL) is 2.

Drainage/Hydraulics Issues:

None.

Agreements with Local Agencies:

None.

Truck/Permit Issues:

Bonus Overload Class: Purple.
Route Class Length: Blue.

Congestion/Facility Closure:

No recurring congestion.
If SR 89 is closed in this segment, detour options may include the following routes: SR 44, SR 139, SR 299 and I-5. In case of a closure on these routes, SR 89 may be used as a detour.
In case of an I-5 closure between Redding & Mt. Shasta, traffic will use a portion of SR 89 & SR 299 as the emergency detour route.
When I-5 is unavailable and SR 89 is the detour, non-recurring congestion may occur.

Access Issues:

None.

Right-of-Way Information:

PM 21.719/27.540 Major portions of this section are on USFS land with a special use permit. 100-200'

Snow/Ice Issues:

Normally chain control is by signs only.

Intelligent Transportation Systems:

In Use: HAR Near JCT SR 89/299 (PM 22.10)

Programmed: CCTV Near Jct SR 299/SR 89

Proposed: CMS Near JCT SR 89/SR 299 Back (PM 22.10)
CMS Near JCT SR 89/SR 299 Ahead (PM 22.10)

Bibliography, Special Studies/Reports:

Shasta County Regional Transportation Plan (RTP), 1998
Shasta County General Plan, 1995
California Fast Facts, CA Department of Tourism, 2001
Economic and Demographic Profile Services, Shasta County, 2001

State Route 89 Segment Fact Sheet

January 2002

Segment: SHA 12 **TCR ID: 089SHA12**

General Information:

Location: McArthur-Burney Falls Memorial State Park to Shasta County Line

Length Miles/ Length Kilometers: 15.805 / 25.436

PM Begin/End: 27.540 \ 43.345 **KP Begin/End:** 44.321 \ 69.345 **Lane Miles/ Lane Kilometers:** 31.610 / 50.872

Facility Concept:

Present: Two-Lane Conventional

Twenty-Year: Two-Lane Conventional

Post Twenty-Year: Two-Lane Conventional

Design Concept:

Typical Section: 12' lane width
8' treated shoulders

Design Speed: 65

Clear Recovery Zone: 20' minimum

Level of Service:

Present LOS: C/C (North/South)

20-Year LOS (No Build): D/D (North/South)

20-Year LOS (Improved): D/D (North/South)

Concept LOS: D

Highway Information:

Grade: 3% (max is 7%)

Terrain: Mountainous

Development: Rural

Percent Non-Passing: 73

Percent Trucks: 24 (16.5% 5+ axles)

Percent RVs: 5

Peak Period Directional Split: 57/43 (North)

Access Points (per mile): 4

HCM Classification: I

Passing Lane: No

Existing Geometrics:

Average Lane Width L/R (ft): 10.9/10.9

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 1.6/1.8

Average Treated Shoulder Width L/R (ft): 0.0/0.0

General Comments: Traveled way widths range from 10' to 12.' Shoulder widths range from 0' to 9.' Treated shoulder widths are 0.0 feet.

System Designations:

Functional Classification: Principal Arterial

NHS:	Yes	**Terminal Access:**	Yes
IRRS:	Yes	**Nat Truck Network:**	No
High Emph:	No	**STRAHNET:**	No
ITSP Focus:	No*	**Bikes Permited:**	Yes
Frwy/Expwy:	No	**Scenic/Historic:**	
Lifeline:	No	Yes-Forest Scenic Byway. Eligible for State Scenic and All American Road.	

Significant Land Uses:

The majority of this segment is forestland. The major recreational areas of Burney Falls State Park and Lake Britton are located in this segment. The Pacific Crest National Scenic Trail, a hiking trail, is also in this segment. The segment ends at the Shasta County/Siskiyou County Line.

Segment Description and General Comments:

The speed limit is posted at 65. Trees and brush are close to the roadway. Deer are dominant in this area and so are open range cattle. There are a few local roads that connect to the highway.

***This segment is a portion of the route proposed for re-designation as a Focus Route.**

Methodology for Traffic Projections

Growth Rate: 1.5%. The following factors were considered in developing the traffic growth forecast:
30-year historical AADT Growth Rate: 3.3%; Regional Transportation Plan (RTP); Limited Current and Future Development; Agricultural and Timber Area; Recreational Traffic; Direct truck route and tourist route to Reno.

Traffic Data

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2000	1750	3000	300	0.30/0.22	59.1/55.7	50.7/51.3
2010	2013	3450	345	0.32/0.26	62.6/63.4	50.3/50.5
2020	2275	3900	390	0.34/0.29	65.8/69.6	50.0/50.2

Segment Improvements:

Segment Issues:
Treated shoulder width is 0 feet.
Lane widths range from 10 to 12 feet.
High left-turn volumes at Clark Creek Road (NB).
Lake Britton Bridge is listed as structurally deficient (weight restriction).
Lake Britton R/R UP is at minimum clearance for height.
Limited solar exposure.
Lack of storage in left-turn pocket at Burney-McArthur Falls State Park.

Major Improvements Programmed:
Roadway Rehabilitation (Cayton Creek Rehab Sha PM 29.4/43.3). *(Rehab pavement, replace bridge, curve corrections and 8-foot shoulder (could include bicycle lane).*
Replace Bridge and Realign Roadway-Environmental Phase-(Lake Britton Bridge Sha PM 21.7/29.8).
(Bridge replacement, realign approach to bridge, realign and/or upgrade RR crossing, and 8-foot shoulders)

Improvements to Maintain Concept LOS:
Years 10-20. Add northbound and southbound passing lanes.
Explore opportunities to combine with Lake Britton Bridge Replacement.

Other Potential Improvements:
Establish eight-foot treated shoulders to enhance safety and serve bicyclists.
Establish twelve-foot (or greater) lane widths to enhance safety and improve mobility.
Construct left turn lane at Clark Creek Road (NB).
Replace Bridge and Realign Roadway (Lake Britton Bridge Sha PM 21.7/29.8).
Improve clearances at Lake Britton R/R UP.
Remove brush and trees from along the roadway to improve solar exposure and visibility of animals.
Proposed Safety Roadside Rest Area from 2000 Masterplan at Pondosa (PM 42.8).
Length left-turn pocket at Burney-McArthur Falls State Park.
Establish twenty-foot clear recovery zone.

Environmental Issues:

Hazardous Sites:

1 site on one or more state listings.

Recorded Species of Concern Species/State/Federal**:**

Bank Swallow/Threatened/None
Bald Eagle/Endangered/Threatened
Bellinger's Meadowform/None/Species of Concern
Rough Sculpin/Threatened/Species of Concern
Egg Lake Monkeyflower/None/Species of Concern
Northern Goshawk/None/Species of Concern
Northern Spotted Owl/None/Threatened
Shasta Crayfish /Endangered /Endangered
Willow Flycatcher/Endangered/None
Tailed Frog/None/Threatened

FEMA Mapped Flood Plains:

None.

Historical Resources (State Historical):

No. 355 Fort Crook (Site of)

Air Quality:

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Shasta County AQMD

Air Basin: Sacramento Valley

Designations:	**State**	**Federal**
PM_{10}	Nonattainment	Unclassified
Ozone		
-8 Hour	Nonattainment	Pending Nonattainment
-1 hour	Nonattainment	Attainment

Accident Data:

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 1, 1996-December 31, 2000)

	Fatality	Fatal + Injury	PDO	Total
Actual Accident Rate	.083	0.54	.657	1.28
Statewide Average Accident Rate	.040	0.64	0.64	1.32

General Comments: Snow, icy roadway conditions occur for at least 4 months per year in this area.

General Issues:

Cell coverage is intermittent-mostly lack of reception.
During normal work hours, emergency response is in a timely manner. After work hours, the time is increased from one to one and a half times regular response.
High deer population.
Rock Fall area.
Open range area.

Structures:

Lake Britton Bridge 06 0052 (PM 29.190)-Structurally Deficient (Weight restriction). Environmental studies underway for possible replacement of structure.
Lake Britton UP 06 0056 (PM 29.340). Height at minimum clearance standards.
Cayton Creek Bridge 06 0053 (PM 31.210)

Pavement Issues:

Asphalt concrete section with varying maintenance treatments, such as, chip seals, digouts and thin blankets. Shoulder surface appears to be the same as adjacent road surface.

Maintenance Service Level (MSL) is 2.

Drainage/Hydraulics Issues:

Burney Creek parallels SR 89 in the vicinity of Lake Britton.

Agreements with Local Agencies:

None.

Truck/Permit Issues:

Lake Britton Bridge is structurally deficient (weight restriction).*
Lake Britton UP (PM 29.340) height is at minimum standards.*
Proposed Safety Roadside Rest Area from 2000 Masterplan at Pondosa (PM 42.8).
Bonus Overload Class: None-legal loads only.*
Route Class Length: Blue.*
*Detour from SR 89S County Road A-19/McArthur Road from Country Road A-20/Glenburn Road to SR 299W to SR 89S.

Congestion/Facility Closure:

After 2010, it is anticipated congestion will occur both in the NB and SB directions. If SR 89 is closed in this segment, detour options may include the following routes: SR 44, SR 139, SR 299 and I-5. In case of a closure on these routes, SR 89 may be used as a detour. In case of an I-5 closure between Redding & Mt. Shasta, traffic will use a portion of SR 89 & SR 299 as the emergency detour route. When I-5 is unavailable and SR 89 is the detour, non-recurring congestion may occur.

Access Issues:

None.

Right-of-Way Information:

PM 27.540/43.345 Major portions of this section are on USFS land with a special use permit. 100-200'

Snow/Ice Issues:

Normally chain control is by signs only. High snow fall and ice can occur on this segment during winter months.

Intelligent Transportation Systems:

In Use: None at this location.

Programmed: None at this location.

Proposed: CCTV Near Red Cut Hill Cut (PM 36.89)
CMS Near Red Cut Hill Cut (PM 36.89)
RWIS Near Red Cut Hill Cut (PM 36.89)

Bibliography, Special Studies/Reports:

Shasta County Regional Transportation Plan (RTP), 1998
Shasta County General Plan, 1995
California Fast Facts, CA Department of Tourism, 2001
Economic and Demographic Profile Services, Shasta County, 2001

State Route 89 Segment Fact Sheet

January 2002

Segment: SIS 13 **TCR ID: 089SIS13**

General Information:

Location: Siskiyou County Line to McCloud

Length Miles/ Length Kilometers: 24.007 / 38.635

PM Begin/End: 0.000 \ 24.007 **KP Begin/End:** 0.000 \ 38.635 **Lane Miles/ Lane Kilometers:** 48.014 / 57.270

Facility Concept:

Present: Two-Lane Conventional

Twenty-Year: Two-Lane Conventional

Post Twenty-Year: Two-Lane Conventional

Design Concept:

Typical Section: 12' lane width
8' treated shoulders

Design Speed: 65

Clear Recovery Zone: 20' minimum

Level of Service:

Present LOS: C

20-Year LOS (No Build): C

20-Year LOS (Improved): C

Concept LOS: D

Highway Information:

Grade: N/A

Terrain: Rolling

Development: Rural

Percent Non-Passing: 75

Percent Trucks: 17 (9.7% 5+ axles)

Percent RVs: 4

Peak Period Directional Split: 59/41 (South)

Access Points (per mile): 2

HCM Classification: I

Passing Lane: No

Existing Geometrics:

Average Lane Width L/R (ft): 11.4/11.5

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 4.3/3.8

Average Treated Shoulder Width L/R (ft): 0.4/0.4

General Comments: Traveled way widths range from 11' to 14.' Shoulder widths range from 0' to 9.' Treated shoulder widths range from 0' to 4.'

System Designations:

Functional Classification: Principal Arterial

NHS:	Yes	**Terminal Access:**	Yes
IRRS:	Yes	**Nat Truck Network:**	No
High Emph:	No	**STRAHNET:**	No
ITSP Focus:	No*	**Bikes Permited:**	Yes
Frwy/Expwy:	No	**Scenic/Historic:**	
Lifeline:	No	Yes-Forest Scenic Byway. Eligible for State Scenic and All American Road.	

Significant Land Uses:

This first part of this segment contains the community of Bartle, which has no services. The remainder of the segment is forestland.

Segment Description and General Comments:

The speed limit is posted at 65 with one curve warning sign posted at 50. Dead Horse Summit is located at the beginning of this segment with an elevation of 4533 feet. There is an at-grade railroad crossing at PM 24.909. There are a few forest service roads that connect to the highway. Several locations in this segment have sag vertical curves that may affect site distance.

***This segment is a portion of the route proposed for re-designation as a Focus Route.**

Methodology for Traffic Projections

Growth Rate: 1.5%. The following factors were considered in developing the traffic growth forecast:
30-year historical AADT Growth Rate: 3%; Regional Transportation Plan (RTP); Limited Current and Future Development; Agricultural and Timber Area; Recreational Traffic; Direct truck route and tourist route to Reno.

Traffic Data

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2000	2000	3500	310	0.162	57.0	54.4
2010	2300	4025	357	0.187	57.4	54.0
2020	2600	4550	403	0.192	60.5	53.7

Segment Improvements:

Segment Issues:
Treated shoulders widths range from 0 to 4 feet.
Lane widths range from 11 to 14 feet.
Limited solar exposure.
High left-turn volumes at County Road A-15 (Medicine Lake).
High left-turn volumes at McCloud River Loop Road (Cattle Camp).
No chain-on/off areas for Deadhorse Summit.
Mud Creek Bridge is structurally deficient (structure).

Major Improvements Programmed:
None.

Improvements to Maintain Concept LOS:
None required.

Other Potential Improvements:
Establish eight-foot (or greater) treated shoulders to enhance safety and serve bicyclists.
Establish twelve-foot (or greater) lane widths to enhance safety and improve mobility.
Develop pullouts/turnouts for trucks and RVs.
Left turn (SB) and deceleration lane (NB) at County Road A-15 (Medicine Lake).
Left turn (NB) and deceleration lane (SB) at McCloud River Loop Road (Cattle Camp).
Remove brush and trees from along the roadway to improve solar exposure and visibility of animals.
Establish chain on/off areas for Deadhorse Summit.
Replace Mud Creek Bridge.
Establish twenty-foot clear recovery zone.

Environmental Issues:

Hazardous Sites:

No recorded hazardous sites along this segment.

Recorded Species of Concern Species/State/Federal:

Northern Goshawk/None/Threatened
Bald Eagle/Endangered/Threatened
Northern Spotted Owl/None/Species of Concern
Pacific Fisher/None/Species of Concern
Willow Flycatcher/Endangered/None
Tailed Frog/None/Threatened

FEMA Mapped Flood Plains:

Ash Creek (PM 14.00/14.12)
Mud Creek (PM 20.94/21.34)
Squaw and Panther Creeks merge (PM 23.9/24.67)

Historical Resources (State Historical):

None at this location.

Air Quality:

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Siskiyou County APCD

Air Basin: Northeast Plateau

Designations:	State	Federal
PM_{10}	Nonattainment	Unclassified
Ozone -8 Hour	Attainment	Unclassified/Attainment
Ozone -1 hour	Attainment	Unclassified/Attainment

Accident Data:

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 1, 1996-December 31, 2000)

	Fatality	Fatal + Injury	PDO	Total
Actual Accident Rate	.023	0.50	.557	1.08
Statewide Average Accident Rate	.039	0.69	.721	1.45

General Comments: Snow, icy roadway conditions occur for at least 4 months per year in this area.

General Issues:

Cell coverage is intermittent-mostly lack of reception.
During normal work hours, emergency response is in a timely manner. After work hours, the time is increased from one to one and a half times regular response.
High deer population.
Open range area.

Structures:

Mud Creek 02 0046 (PM 21.080)-Structurally Deficient (Structure Condition).

Pavement Issues:

Asphalt concrete section with varying maintenance treatments, such as, chip seals, digouts and thin blankets. Shoulder surface appears to be the same as adjacent road surface.

Maintenance Service Level (MSL) is 2.

Drainage/Hydraulics Issues:

See FEMA Mapped Flood Plains under **Environmental Issues.**

Agreements with Local Agencies:

None.

Truck/Permit Issues:

Mud Creek Bridge is structurally deficient (structure condition).

Bonus Overload Class: Purple.
Route Class Length: Blue

Congestion/Facility Closure:

During the next ten years, it is anticipated congestion will occur in the NB and SB directions. If SR 89 is closed in this segment, detour options may include the following routes: SR 44, SR 97, SR 139, SR 161, SR 299 and I-5. In case of a closure on these routes, SR 89 may be used as a detour. In case of an I-5 closure between Redding & Mt. Shasta, traffic will use a portion of SR 89 & SR 299 as the emergency detour route. When I-5 is unavailable and SR 89 is the detour, non-recurring congestion may occur.

Access Issues:

None.

Right-of-Way Information:

PM 0.00/8.00 Major portions of this section are on USFS land with a special use permit. 100-200'
PM 8.00/8.80 Prescriptive
PM 8.80/24.000 Major portions of this section are on USFS land with a limited title to the right-of-way 100-132'
PM 24.000/24.007 With Access Control 100-300'

Snow/Ice Issues:

Normally chain control is by signs only. High snow fall and ice can occur on this segment during winter months (Deadhorse Summit PM 3.24 Elevation 4533).

Intelligent Transportation Systems:

In Use: None at this location.

Programmed: None at this location.

Proposed: RWIS Near Deadhorse Summit (PM 3.23)
CCTV Near Deadhorse Summit (PM 3.23)
CMS Near Deadhorse Summit (PM 3.23)

Bibliography, Special Studies/Reports:

Siskiyou County Regional Transportation Plan (RTP), 1998
Siskiyou County General Plan, 1980
California Fast Facts, CA Department of Tourism, 2001
Economic and Demographic Profile Services, Siskiyou County, 2001

State Route 89 Segment Fact Sheet

January 2002

Segment: SIS 14 **TCR ID: 089SIS14**

General Information:

Location: McCloud to Mountain House Road

Length Miles/ Length Kilometers: 4.469 / 7.192

PM Begin/End: 24.007 \ 28.476 **KP Begin/End:** 38.636 \ 45.828 **Lane Miles/ Lane Kilometers:** 8.938 / 14.384

Facility Concept:

Present: Two-Lane Conventional

Twenty-Year: Two-Lane Conventional

Post Twenty-Year: Four-Lane Expressway

Design Concept:

Typical Section: 12' lane width
8' treated shoulders

Design Speed: 65

Clear Recovery Zone: 20' minimum

Level of Service:

Present LOS: C/C (North/South)

20-Year LOS (No Build): C/E (North/South)

20-Year LOS (Improved): C/D (North/South)

Concept LOS: D

Existing Geometrics:

Average Lane Width L/R (ft): 10.4/10.5

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 4.8/4.8

Average Treated Shoulder Width L/R (ft): 4.0/4.0

General Comments: Traveled way widths range from 10' to 12.' Shoulder widths range from 0' to 8.' Treated shoulder widths are 4.0 feet.

Highway Information:

Grade: 4% (max is 6%)

Terrain: Mountainous

Development: Rural

Percent Non-Passing: 71

Percent Trucks: 18 (7.8% 5+ axles)

Percent RVs: 5

Peak Period Directional Split: 59/41 (South)

Access Points (per mile): 3

HCM Classification: I

Passing Lane: Yes (1)
NB 26.391/26.645
NB 29.148/29.461

System Designations:

Functional Classification: Principal Arterial

NHS:	Yes	**Terminal Access:**	Yes
IRRS:	Yes	**Nat Truck Network:**	No
High Emph:	No	**STRAHNET:**	No
ITSP Focus:	No*	**Bikes Permited:**	Yes
Frwy/Expwy:	Yes	**Scenic/Historic:**	
Lifeline:	No	Yes-Forest Scenic Byway. Eligible for State Scenic and All American Road.	

Significant Land Uses:

This segment contains the community of McCloud. McCloud has mixed uses of residential, commercial and light industrial. McCloud has some potential for residential, commercial and light industrial growth. Funding is anticipated for construction of a central community sewage collection and treatment system which would provide for additional growth. A section of timber production zoning land was traded out in the late 1990's and is planned for mixed residential/hotel/commercial use.

Segment Description and General Comments:

The speed limit is posted at 55 with no curve warning signs. Pedestrian activity is high at the SR 89/Broadway intersection. Trees and brush are close to the roadway. Several locations in this segment have sag vertical curves and may affect site distance.

***This segment is a portion of the route proposed for re-designation as a Focus Route.**

Methodology for Traffic Projections

Growth Rate: 2.5%. The following factors were considered in developing the traffic growth forecast:
30-year historical AADT Growth Rate: 3%; Regional Transportation Plan (RTP) ; Significant Potential for New Residential, Recreational and Commercial Development; Commute Traffic between McCloud and Mt. Shasta/I-5; Direct truck route and tourist route to Reno.

Traffic Data

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2000	2450	3800	350	0.28/0.33	50.8/63.0	52.5/51.6
2010	3063	4750	438	0.35/0.41	57.3/75.1	50.9/51.4
2020	3675	5700	525	0.41/0.43	63.7/81.4	50.0/49.0

Segment Improvements:

SEGMENT ISSUES:
Lane widths range from 10 to 12 feet.
Limited solar exposure.
High left-turn volumes at East Minnesota.
Right turn at Broadway (damage to surface by deceleration of heavy vehicles).
Heavy cross traffic at Broadway.
Additional room at chain-on/off areas.
Limited solar exposure.

MAJOR IMPROVEMENTS PROGRAMMED:
None.

IMPROVEMENTS TO MAINTAIN CONCEPT LOS:
Years 10-20. Add SB passing lane.
Years 10-20. Extend existing passing lane (NB) at Snowman's Hill Summit.
Post twenty-year concept is four-lane expressway.

OTHER POTENTIAL IMPROVEMENTS:
Establish eight-foot treated shoulders to enhance safety and serve bicyclists.
Establish twelve-foot (or greater) lane widths to enhance safety and improve mobility.
Portland Concrete cement right turn deceleration lane at Broadway (NB).
Upgrade existing pedestrian undercrossing at Minnesota.
Left-turn lane at Minnesota.
Local trail plan suggests enhanced crossing opportunities at key intersections.
Local road approaches may require upgrade with additional residential/ commercial development (County).
Remove brush and trees from along the roadway to improve solar exposure and visibility of animals.
Enhance crossing approach at Broadway.
Improved chain on/off areas.
Establish twenty-foot clear recovery zone.

Environmental Issues:

Hazardous Sites:

19 sites on one or more state listings.

Recorded Species of Concern Species/State/Federal:

Northern Spotted Owl/None/Threatened
Pacific Fisher/None/Species of Concern

FEMA Mapped Flood Plains:

Squaw and Panther Creeks merge (PM 23.9/24.67)

Historical Resources (State Historical):

None at this location.

Air Quality:

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Siskiyou County APCD

Air Basin: Northeast Plateau

Designations:	State	Federal
PM_{10}	Nonattainment	Unclassified
Ozone -8 Hour	Attainment	Unclassified/Attainment
Ozone -1 hour	Attainment	Unclassified/Attainment

Accident Data:

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 1, 1996-December 31, 2000)

	Fatality	Fatal + Injury	PDO	Total
Actual Accident Rate	.000	0.39	0.57	0.96
Statewide Average Accident Rate	.018	0.52	.632	1.17

General Comments: Snow, icy roadway conditions occur for at least 4 months per year in this area.

General Issues:

Cell coverage is intermittent along the route-mostly lack of reception.
During normal work hours, emergency response is in a timely manner. After work hours, the time is increased from one to one and a half times regular response.
High deer population.
Open range area.

Structures:

Old Mill PUC 02 0050 (PM 25.060)

Pavement Issues:

Asphalt concrete section with varying maintenance treatments, such as, chip seals, digouts and thin blankets. Shoulder surface appears to be the same as adjacent road surface.

Maintenance Service Level (MSL) is 2.

Drainage/Hydraulics Issues:

See FEMA Mapped Flood Plains under **Environmental Issues.**

Agreements with Local Agencies:

None.

Truck/Permit Issues:

Bonus Overload Class: Purple.
Route Class Length: Yellow.

Congestion/Facility Closure:

Congestion may occur when the Mt. Shasta Ski Park is open, McCloud has special events or I-5 is closed and SR 89 is used as a detour. Many travelers also park on the highway at Snowman's Hill for winter activities. If SR 89 is closed in this segment, detour options may include the following routes: SR 44, SR 97, SR 139, SR 161, SR 299 and I-5. In case of a closure on these routes, SR 89 may be used as a detour. In case of an I-5 closure between Redding & Mt. Shasta, traffic will use a portion of SR 89 & SR 299 as the emergency detour route.

Access Issues:

Siskiyou 24.007/29.400 (McCloud). The number of access points (County roads) onto the highway at McCloud is limited, with the majority of vehicular, pedestrian and bicycle activity occurring at one intersection. Much of the traffic is crossing rather than entering the highway, and this can lead to considerable delays at peak periods.

Right-of-Way Information:

PM 24.007/28.476 With Access Control 100-300'

Snow/Ice Issues:

Normally chain control is by signs only. High snow fall and ice can occur on this segment during winter months.

Intelligent Transportation Systems:

In Use: None at this location.

Programmed: None at this location.

Proposed: CMS Near McCloud (PM 23.50)

Bibliography, Special Studies/Reports:

Siskiyou County Regional Transportation Plan (RTP), 1998
Siskiyou County General Plan, 1980
California Fast Facts, CA Department of Tourism, 2001
Economic and Demographic Profile Services, Siskiyou County, 2001

State Route 89 Segment Fact Sheet

January 2002

Segment: SIS 15 **TCR ID: 089SIS15**

General Information:

Location: Mountain House Road to Junction SR 89/SR 5 **Length Miles/ Length Kilometers:** 6.146 / 9.891

PM Begin/End: 28.476 \ R34.622 **KP Begin/End:** 45.828 \ R55.719 **Lane Miles/ Lane Kilometers:** 12.292 / 19.292

Facility Concept:

Present: Two-Lane Expressway

Twenty-Year: Two-Lane Expressway

Post Twenty-Year: Four-Lane Expressway

Design Concept:

Typical Section: 12' lane width
8' treated shoulders

Design Speed: 65

Clear Recovery Zone: 30' minimum

Level of Service:

Present LOS: C/C (North/South)

20-Year LOS (No Build): C/D (North/South)

20-Year LOS (Improved): C/D (North/South)

Concept LOS: D

Highway Information:

Grade: 4% (max is 6%)

Terrain: Mountainous

Development: Rural

Percent Non-Passing: 71

Percent Trucks: 15 (10.3% 5+ axles)

Percent RVs: 4

Peak Period Directional Split: 59/41 (South)

Access Points (per mile): 4

HCM Classification: I

Passing Lane: Yes (3)
NB 29.148/29.461
SB 29.537/29.192
SB 32.245/32.160

Existing Geometrics:

Average Lane Width L/R (ft): 12.0/12.0

Average Median Width (ft): N/A

Average Total Shoulder Width L/R (ft): 3.6/3.6

Average Treated Shoulder Width L/R (ft): 3.6/3.6

General Comments: Traveled way widths are 12.' Shoulder widths range from 0' to 4.' Treated shoulder widths range from 0' to 4.'

System Designations:

Functional Classification: Principal Arterial

NHS:	Yes	**Terminal Access:**	Yes
IRRS:	Yes	**Nat Truck Network:**	No
High Emph:	No	**STRAHNET:**	No
ITSP Focus:	No*	**Bikes Permited:**	Yes
Frwy/Expwy:	Yes	**Scenic/Historic:**	
Lifeline:	No	Yes-Forest Scenic Byway. Eligible for State Scenic and All American Road.	

Significant Land Uses:

The Mt. Shasta Board and Ski Park is located near the southern end of this segment. This facility attracts a significant number of trips throughout the year. The majority of the rest of the segment is forestland. Planned developments include residential developments near the Interstate 5 connection.

Segment Description and General Comments:

The speed limit is posted at 65 with one curve warning sign listed at 40. The segment contains Snowman's Hill Summit. Trees and brush are close to the roadway. The Interstate 5 connection is at the end of this segment allowing access to NB or SB Interstate 5.

***This segment is a portion of the route proposed for re-designation as a Focus Route.**

Methodology for Traffic Projections

Growth Rate: 2.5%. The following factors were considered in developing the traffic growth forecast:
30-year historical AADT Growth Rate: 3%; Regional Transportation Plan (RTP); Recreational Traffic including expanded activities at Mt. Shasta Ski Park; Commute Traffic between McCloud and Mt. Shasta/I-5; Direct truck route and tourist route to Reno.

Traffic Data

Year	AADT	Peak Month	Peak Hour	V/C Ratio	% Time Spent Following	Average Travel Speed
2000	3300	4700	450	0.14/0.18	53.8/58.2	54.8/54.4
2010	4125	5875	563	0.16/0.23	54.2/67.7	54.3/53.7
2020	4950	7050	675	0.19/0.27	57.7/70.2	53.9/53.1

Segment Improvements:

SEGMENT ISSUES:
Treated shoulders range from 0 to 4 feet.
Limited solar exposure.
Traffic generated by ski park & other recreational activities near Snowman's Hill can cause delay to through vehicles on SR 89.
Storage in left-turn pocket at ski park inadequate for peak periods.
Parking on highway shoulders also occurs on occasion.
Local Road Connection (Mt. Shasta Boulevard) from SR 89 to the City of Mt. Shasta is curvilinear & can be icy during winter.
Additional chain-on/off areas.

MAJOR IMPROVEMENTS PROGRAMMED:
None.

IMPROVEMENTS TO MAINTAIN CONCEPT LOS:
Post twenty-year concept is four-lane expressway.
Years 10-20. Add SB passing lane.

OTHER POTENTIAL IMPROVEMENTS:
Establish eight-foot treated shoulders to enhance safety and serve bicyclists.
Establish twelve-foot (or greater) lane widths to enhance safety and improve mobility.
Extend left turn bay at Ski Park to accommodate peak traffic.
Local commercial & residential developed planned in vicinity of SR 89/I-5 (Azalea Road). May necessitate improvements to intersection & overcrossing (County/City).
Improve Mt. Shasta Boulevard and/or develop second access from SR 89 to the City of Mt. Shasta (County/City).
Extend existing passing lane (SB) at Snowman's Hill.
Parking area at Snowman's Hill (Partnership project).
Remove brush & trees along the highway to improve solar exposure and visibility of animals.
Improve chain-on/off areas.
Establish thirty-foot clear recovery zone.

Environmental Issues:

Hazardous Sites:

21 sites on one or more state listings.

Recorded Species of Concern Species/State/Federal**:**

Pacific Fisher/None/Species of Concern
Northern Goshawk/None/Species of Concern

FEMA Mapped Flood Plains:

None.

Historical Resources (State Historical):

None at this location.

Air Quality:

Air Quality Contact: Caltrans District 2 Regional/Air Quality Planning

Air Quality Management District: Shasta County AQMD

Air Basin: Northeast Plateau

Designations:	**State**	**Federal**
PM_{10}	Nonattainment	Unclassified
Ozone		
-8 Hour	Attainment	Unclassified/Attainment
-1 hour	Attainment	Unclassified/Attainment

Accident Data:

Traffic Collision Rate (per million vehicle miles) from TASAS Database (January 1, 1996-December 31, 2000)

	Fatality	Fatal + Injury	PDO	Total
Actual Accident Rate	.000	0.66	0.75	1.41
Statewide Average Accident Rate	.018	0.52	.652	1.19

General Comments: Snow, icy roadway conditions occur for at least 4 months per year in this area.

General Issues:

Cell coverage is intermittent-mostly lack of reception.
During normal work hours, emergency response is in a timely manner. After work hours, the time is increased from one to one and a half times regular response.
High deer population.
Open range area.

Structures:

SR 89/I-5 Connector Separator 02 0127E (PM R34.600)-

Pavement Issues:

Asphalt concrete section with varying maintenance treatments, such as, chip seals, digouts and thin blankets. Shoulder surface appears to be the same as adjacent road surface.

Maintenance Service Level (MSL) is 2.

Drainage/Hydraulics Issues:

None.

Agreements with Local Agencies:

None.

Truck/Permit Issues:

Bonus Overload Class: Purple.
Route Class Length: Yellow.

Congestion/Facility Closure:

Congestion may occur when the Mt. Shasta Ski Park is open, McCloud has special events or I-5 is closed and SR 89 is used as a detour. Many travelers also park on the highway at Snowman's Hill for winter activities. If SR 89 is closed in this segment, detour options may include the following routes: SR 44, SR 97, SR 139, SR 161, SR 299 and I-5. In case of a closure on these routes, SR 89 may be used as a detour. In case of an I-5 closure between Redding & Mt. Shasta, traffic will use a portion of SR 89 & SR 299 as the emergency detour route.

Access Issues:

None.

Right-of-Way Information:

PM 24.007/28.476 With Access Control 100-300'

Snow/Ice Issues:

Normally chain control is by signs only. High snow fall and ice can occur on this segment during winter months (Snowman's Hill Summit PM 29.42 Elevation 4470).

Intelligent Transportation Systems:

In Use: RWIS Near Snowman's Hill Summit (PM 29.25)

Programmed: CCTV Near Snowman's Hill Summit (PM 29.25)
CCTV Near I-5/SR 89 Separation

Proposed: None at this location.

Bibliography, Special Studies/Reports:

Siskiyou County Regional Transportation Plan (RTP), 1998
Siskiyou County General Plan, 1980
California Fast Facts, CA Department of Tourism, 2001
Economic and Demographic Profile Services, Siskiyou County, 2001

Appendix A: Glossary

Aa

Access Control: The condition where the right of owners or occupants of abutting land or other persons to access a highway is fully or partially controlled by public authority.

Access Management: Involves managing where vehicles enter the highway to improve highway operations and reduce accidents.

Access Point: Location where vehicles can enter or exit a highway.

Adoption: California Transportation Commission (CTC) establishment of a specific highway route location.

Air Basin: An area or territory that contains similar meteorological and geographical conditions. In California, the Air Resources Board (ARB) has established nine air basins.

All-Way Stop Control: An intersection with stop signs at all approaches.

Annual Average Daily Traffic (AADT): Daily traffic that is averaged over a calendar year or fiscal year.

Arterial: A class of street that primarily serves through-traffic and major traffic movements.

Arterial Highway: A general term denoting a highway primarily used by through traffic usually on a continuous route.

Auxiliary Lane: The portion of the roadway for weaving, truck climbing, speed change, or other purposes supplementary to through traffic movement.

Average Daily Traffic (ADT): The average number of vehicles passing a specified point during a 24-hour period. Frequently used in relation to the "peak-month" average daily traffic.

Average Lane Width: The average width of a travel lane. It is a weighted average of all lane widths found in the facility segment under consideration.

Average Median Width: The weighted average of all median widths found in the facility segment under consideration.

Average Travel Speed (ATS): A performance measure used to estimate level of service on a two-lane highway. The facility length divided by the average travel time of all vehicles traversing the facility, including all stopped delay times.

Average Shoulder Width: The weighted average of all shoulder widths found in the facility segment under consideration.

Bb

Bypass: An arterial highway that permits traffic to avoid part or all of an urban area.

Bike Route Class: Classification of a bicycle facility. There are three classes: Class I (bicycle facility separate from roadway), Class II (designated bicycle facility adjacent to roadway), Class III (non-designated but open to bicycles).

Cc

California Environmental Quality Act (CEQA): 1970 State legislation that requires that State agencies regulate activities with major consideration for environmental protection.

California Transportation Investment System Tool (CTIS): A tool that visually displays, using GIS software, where transportation investment is currently underway (programmed) and where it is planned over the next 20 years.

Caltrans or Department: California Department of Transportation.

Capacity: The maximum number of vehicles or persons that can pass a point on a roadway during a specified time period (usually one hour) under prevailing roadway, traffic and control conditions.

Capacity Expansion: New facilities and operational improvements, which add through lanes.

Carbon Monoxide (CO): A product of incomplete burning of fuel, produced by motor vehicles (the primary source), home heating, and, to a lesser extent, industrial activities.

Carpool: A group of people who share automobile transportation to designated destinations, usually alternating drivers and vehicles.

Changeable Message Signs (CMS): Electronic signs that can change the message it displays. Often used on highways to warn and redirect traffic. Also referred to as variable or electronic message signs.

Channelization: The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands or other suitable means to facilitate the safe and orderly movement of both vehicles and pedestrians.

Clear Recovery Zone: An area clear of fixed objects adjacent to the roadway to provide a recovery zone for vehicles that have left the traveled way. A minimum clear recovery area of 20 feet on conventional highways and 30 feet on freeways and high speed expressways is desirable.

Climbing lane: A lane added on an uphill grade for use by trucks, recreational vehicles and other heavy vehicles with speeds significantly reduced by grade.

Closed Circuit Television (CCTV): This ITS technology allows a camera to display remote verification of road and weather conditions, traffic conditions and incidents. This CCTV camera will have compatibility with other communication technologies, such as, cable TV, kiosks and the Internet.

Coincident: Occurring at the same time; in agreement. A highway made be signed coincident with another highway (Example: SR 89/SR 70).

Collector: A roadway providing land access and traffic circulation within residential, commercial and industrial areas.

Concept: A strategy for future improvements that will reduce congestion or maintain the existing level of service on a specific route.

Continuous left-turn lane: A lane that simultaneously serves left turning vehicles traveling in opposite directions.

Conformity: Process to assess the compliance of any Federally funded or approved transportation plan, program, or project with air quality implementation plans. The conformity process is defined by the Clean Air Act.

Congestion: Defined as, reduced speeds of less than 35 miles per hour for longer than 15 minutes.

Controlled Access Highway: In situations where the Director or the California Transportation Commission (CTC) has determined it advisable, a facility may be designated a "controlled access highway" in lieu of the designation "freeway". All statutory provisions pertaining to freeways and expressways apply to controlled access highways.

Conventional Highway: A highway without control of access, which may or may not be divided. Grade separations at intersections or access control may be used when justified at spot locations.

Corridor: A set of essentially parallel transportation facilities for moving people and goods between two points.

Crawl Speed: The maximum sustained speed that can be maintained by a specified type of vehicle on a constant upgrade of a given percent.

Dd

Daily Vehicle Miles of Travel: An estimate of Annual Vehicle Miles of Travel is the product of AADT X Segment Length X 365 days.

Deceleration Lane: A short auxiliary lane that allows right-turning vehicles to slow prior to turning.

Delay: The time lost while traffic is impeded by some element over which the driver has no control.

Density: The number of vehicles per mile (or per lane per mile) on the traveled way at a given instant.

Design Exception: Written record that documents the engineering decisions leading to the exception from a design standard. Exceptions are possible for both mandatory and advisory design standards.

Design Speed: A speed selected to establish specific minimum geometric (horizontal, vertical, site distance) design elements for a particular section of highway.

District: Department of Transportation Districts.

Divided Highway: A highway with separated roadbeds for traffic in opposing directions.

Ee

Easement: A right to use or control the property of another for designated purposes.

Encroachment: Occupancy of project right-of-way by non-project structures or objects of any kind or character.

Environmental Impact Report (EIR): A detailed statement setting forth the environmental effects and considerations pertaining to a project as specified in California Environmental Quality Act (CEQA), and may mean either a Draft or a Final EIR.

Environmental Impact Statement (EIS): An environmental impact document prepared pursuant to the National Environmental Policy Act (NEPA) of 1969. The Federal government uses the term EIS in the place of the environmental impact report (EIR), which is used in CEQA.

Environmental Scoping Tool: A tool that visually displays, using GIS software, where habitats, species and hazardous sites are currently located.

Exclusive Turn Lane: A storage area designated to only accommodate left or right turning vehicles.

Expressway: An arterial highway with at least partial control of access, which may or may not be divided or have grade separations at intersections.

Ff

Facility Concept: General term used to describe the number of lanes and degree of access control on a State Route or Freeway. The term can be used to describe the existing facility or the future facility that will be required to handle projected traffic volumes within adopted level of service standards.

Fatal Plus Injury Actual: Contains specific data for accidents that are State highway related. Each accident record contains a ramp, intersection or highway post-mile address that ties it to the highway database.

Fatal Plus Injury Average: The Statewide Average Accident Rate (SWA) is based on a rated segment. The accident-rating factor (ARF) indicates how the existing segment compares to other segments on the State Highway System. The ARF is a comparison of then segment's accident rate to the statewide average accident rate for roads of the same type and having similar characteristics. Accident severity as well as accident frequency is considered in calculating the ARF.

Fatal Plus Injury per Million Vehicle Miles: The fatality rate of those killed in vehicles plus the injury rare of those injured in vehicles.

Federal Highway Administration (FHWA): An agency of the US Department of Transportation that funds highway planning programs.

Federal Transit Administration (FTA): An agency of the US Department of Transportation that funds transit planning and deployment programs.

Fiscal Year (FY): For California, the FY is the accounting period beginning July 1 and ending June 30. For Federal budget and accounting purposes the FY period begins October 1 and ends September 30.

Focus Routes: These routes are a subset of the 34 High Emphasis IRRS routes. They represent the ten corridors that should be the highest priority for completion to minimum facility standards in order to serve higher volume interregional trip movements.

Free Flow Speed: The average speed of vehicles on a given facility, measured under low-volume conditions, when drivers tend to drive at their desired speed and are not constrained by delay from traffic control devices.

Freeway: A divided arterial highway with full control of access and with grade separations at intersections. A freeway, as defined by statute, is also a highway in respect to which: (1) the owners of abutting lands have no right or easement of access to or from their abutting lands; or (2) such owners have only limited or restricted right or easement of access. This statutory definition also includes expressways.

Freeway and Express System (F&E): The Statewide system of highways declared by the Legislature to be essential to the future development of California. The F&E System has been constructed with a large investment of funds for the ability of control access, in order to ensure the safety and operational integrity of the highways.

Freeway-to-freeway Connection: A single or multilane connection between freeways.

Frontage Street or Road: A local street or road auxiliary to and located on the side of an arterial highway for service to abutting property and adjacent areas and for control of access.

Functional Classification: Guided by Federal legislation, refers to a process by which streets and highways are grouped into classes or systems, according to the character of the service that is provided, i.e., Principal Arterials, Minor Arterials and Major Collectors).

Gg

Gap: The time, in seconds, for the front bumper of the second of two successive vehicles to reach the starting point of the front bumper of the first.

Geometric Design: Geometric design is the arrangement of the visible elements of a road, such as alignment, grades, sight distances, widths, slopes, etc.

Goods Movement: The general term referring to the flow of commodities, modal goods movement systems and goods movement institutions.

Grade: As used in capacity analysis, grade refers to the average change in elevation on the segment under study, expressed as a percentage.

Grade Separation: A crossing of two highways or a highway and a railroad at different levels.

Hh

Headway (Highway): The time in seconds between consecutive vehicles moving past a point, in a given lane, measured front to front.

High Emphasis Routes: High Emphasis routes that are characterized as being the most critical Interregional Road System (IRRS) routes. More importantly, these routes are critical to interregional travel and the state as a whole.

High Occupancy Vehicle (HOV): Term for multi-occupant highway vehicles such as buses, jitneys, vans and carpools.

Highway: Term applies to roads, streets, and parkways, and also includes right-of-way, bridges, railroad crossings, tunnels, drainage structures, signs, guard rails, and protective structures in connection with highways.

Highway Advisory Radio (HAR): An ITS technology that provides valuable information to travelers through prerecorded messages that contain traffic information, road conditions, chain requirements and road closures, etc. Transmission is generally accomplished through low-powered AM broadcast.

Highway Capacity Manual (HCM): Updated in 2000 by the Transportation Research Board of the National Research Council, the HCM presents various methodologies for analyzing the operation (Level-of-Service) of transportation systems.

Highway Classification: For purposes of capacity analysis, separation of two-lane highways into Class I, II or III. Class I includes major interregional routes, Class II includes smaller links in the system and Class III includes segments of two-lane highway in smaller developed areas or communities.

Highway Planting: Vegetation placed for aesthetic, safety, environmental mitigation, or erosion control purposes, including necessary irrigation systems, inert materials, mulches and appurtenances.

Highway Trust Fund: Federal user fees on gasoline, etc. go into this fund. Used to reimburse states for Federal-aid projects.

High Occupancy Vehicle (HOV) Lane: Preferential or exclusive lane for high occupancy vehicles.

Hydrocarbons (HC): Incompletely burned or evaporated fuel or solvents, produced by mobile sources and industrial sources.

Ii

Incident Management: Technologies that allow transportation managers to identify and respond quickly to incidents on the highway system.

Initial Study: A preliminary analysis prepared by the lead agency to determine whether an environmental impact report (EIR) or negative declaration must be prepared pursuant to the California Environment Quality Act (CEQA).

Intelligent Transportation Systems (ITS):. Use of advanced sensor, computer, and electronic systems to increase the safety and efficiency of the transportation system.

Interchange: A system of interconnecting roadways in conjunction with one or more grade separations providing for the interchange of traffic between two or more roadways on different levels.

Intermodal: The ability to connect, and make connections between modes of transportation.

Intermodal Corridor of Economic Significance (ICES): Significant National Highway System Corridors that link intermodal facilities most directly, conveniently and efficiently to intrastate, interstate, and international markets.

Intermodal Transportation Management System (ITMS): ITMS is an integral and fundamental tool used in system planning and advanced planning activities. The ITMS provides an interactive, intermodal and multimodal, quick response transportation planning analysis tool for use in system planning and jointly with regional agencies.

Interregional Road System (IRRS): A series of interregional state highway routes, outside the urbanized areas, that provides access to, and links between, the State's economic centers, major recreational areas and urban and rural regions.

Interregional Transportation Strategic Plan (ITSP): The ITSP identifies six key objectives for implementing the Interregional Improvement Program and strategies and actions to focus improvements and investments. This document also addresses development of the interregional road system and intercity rail in California, and defines a strategy that extends beyond the 1998 State Transportation Improvement Program (STIP).

Intersection: The general area where two or more roadways join or cross, which include roadside facilities for traffic movements in that area.

Interstate Highway System: The system of highways that connects the principal metropolitan areas, cities, and industrial centers of the United States. The Interstate System also connects the US to internationally significant routes in Mexico and Canada.

Island: A defined area between traffic lanes for control of vehicle movements or for pedestrian refuge. Within an intersection a median or an outer separation is considered an island.

Kk

Kilometer Post (KP): Using kilometers and counties, the KP system identifies specific and unique locations in the California highway system.

Ll

Lane Numbering: On a multilane roadway, the traffic lanes available for through traffic traveling in one direction are numbered from left to right when facing in the direction of traffic flow.

Left turn lane: A storage area designated to only accommodate left turning vehicles.

Level-of-Service (LOS): A rating using qualitative measures that characterize operational conditions within a traffic stream and perception of those measures by motorists and passengers.

Lifeline Route: A route on the State Highway System that is deemed so critical to emergency response/life safety activities of a region or the state. It must remain open immediately following a major earthquake, or for which preplanning for detour and/or expeditious repair and reopening can guarantee the through movement of emergency equipment and supplies.

Local Street or Local Road: A street or road primarily for access to residences, businesses, or other abutting property.

Local Transportation Commission (LTC): A designated transportation planning agency for a county which is not within the jurisdiction of a statutorily created Regional Transportation Planning Agency or a Council of Governments.

Mm

Maintained Miles: The length of a facility that is preserved and kept in the safe and usable condition to which it has been improved.

Median: The portion of a divided highway separating the traveled ways for traffic in opposite directions.

Median Lane: A speed change lane within the median to accommodate left turning vehicles.

Memorandum of Understanding (MOU): Formal structure for interagency cooperation.

Merging: The converging of separate streams of traffic into a single stream.

Metropolitan Planning Organization (MPO): By federal provision, the Governor designates this organization by principal elected officials of general-purpose local governments. MPOs are established to create a forum for cooperative decision-making. Each MPO represents an urbanized area with a population of over 50,000 people.

Minimum Turning Radius: The radius of the path of the outer front wheel of a vehicle making its sharpest turn.

Mixed Flow: Traffic movement having automobiles, trucks, buses and motorcycles sharing traffic lanes.

Mode: Types of transportation: auto, bus, rail, etc.

Multimodal: The availability of transportation options using different modes within a system or corridor.

Multiple Lanes: Freeways and conventional highways are sometimes defined by the total number of through traffic lanes in both directions. Thus, an 8-lane freeway has 4 through traffic lanes in each direction. Likewise, a 4-lane conventional highway has 2 through traffic lanes in each direction.

Nn

National Environmental Policy Act (NEPA): 1969 legislation requiring all Federal agencies to prepare an environmental impact statement evaluating proposed Federal actions which may significantly affect the environment.

National Highway System (NHS): ISTEA established a 155,000-mile NHS to provide an interconnected system of principle arterial routes to serve major travel destinations and population centers, international border crossings, as well as ports, airports, public transportation facilities and other intermodal transportation facilities. The NHS must also meet national defense requirements and serve interstate and interregional travel.

National Network (NN) for Trucks: This network is comprised of the National System of Interstate and Defense Highways, examples are I-10, I-5 and I-80. STAA Trucks are allowed on the NN.

Nitrogen Oxides (NO_x): Products of high-compression internal combustion engines, power plants and other large burners.

Non-Motorized Transportation Facility: That combination of vehicles and ways generally including bikeways bicycles, sidewalks, bridle paths and horses which permit the transport of people.

Oo

Outer Separation: The portion of an arterial highway between the traveled ways of a roadway for through traffic and a frontage street or road.

Pp

Particulate Matter (PM_{10}): Mostly carbon particles much like soot; however, fine particles of dust, metals, asbestos and suspended droplets are also found. Produced by industry, motor vehicles and natural processes. Fugitive dust comes from such sources as agricultural tilling, construction, mining and quarrying, paved and unpaved road and wind erosion.

Passing Lane: A lane added to improve passing opportunities in one direction of travel on a two-lane highway.

Peak: 1. The period during which the maximum amount of travel occurs. It may be specified as the morning (a.m.) or afternoon or evening (p.m.) peak. 2. The period during which the demands for transportation services is the heaviest.

Peak Period Directional Split: During the peak period, the directional distribution of traffic.

Platoon: A group of vehicles traveling together as a group, either voluntarily or involuntarily because of signal control, geometrics, lack of passing opportunities or other factors.

Post-Mile (PM): Using miles and counties, the PM system identifies specific and unique locations in the California highway system.

Percent Time Spent Following (PTSF): A performance measure used to estimate level of service on a two-lane highway. It is the average percentage of travel time that vehicles must travel in platoons behind slower vehicles due to the inability to pass.

Prescriptive: Type of easement that comes into existence without formal action because of long term historical use in a corridor. A prescriptive right cannot be established over land owned by a governmental entity.

Programming: Process of scheduling high-priority projects for development and implementation.

Project Initiation Document (PID): A report that documents agreement on the design concept, design scope, schedule and estimated cost of a project so that the project can be included in a future programming document. Reports include, among others, the PSR, PSSR, Combined PSR/PR, PEER and the NBSSR.

Project Report: Report summarizing the feasibility of needs, alternatives, costs, etc., of a proposed transportation project affecting state transportation facilities. Often project reports consist of a Transmittal Letter and a draft environmental document.

Public Participation: The active and meaningful involvement of the public in the development of transportation plans and programs.

Public Transportation: Transportation service to the public on a regular basis using vehicles that transport more than one person for compensation, usually but not exclusively over a set route or routes from one fixed point or another. Routes and schedules may be determined through a cooperative arrangement.

Rr

Ramp: A connecting roadway between a freeway or expressway and another highway, road, or roadside area.

Ramp Metering: A traffic management strategy which utilizes a system of traffic signals on freeway entrance and connector ramps to regulate the volume of traffic entering a freeway corridor. This is to maximize the efficiency of the freeway and thereby minimize the total delay in the transportation corridor.

Recission: California Transportation Commission (CTC) cancellation of a previously adopted highway route location.

Region (Transportation Planning): A geographical area assigned to a Regional Transportation Planning Agency (RTPA) responsible for regional transportation planning.

Regional Transportation Plan (RTP): State-mandated documents to be developed biennially by all region transportation planning agencies (RTPAs). They consist of policy, action and financial elements.

Regional Transportation Planning Agency (RTPA): Created by AB 69 to prepare regional transportation plans and designated by the Business, Transportation and Housing (BT&H) secretary to receive and allocate transportation funds. RTPAs can be Councils of Government (COGs), Local Transportation Commissions (LTCs), Metropolitan Planning Organizations (MPOs), or statutorily-created agencies.

Rehabilitation: Activities which preserve the quality and structural integrity of a roadway by supplementing normal maintenance activities.

Relinquishment: A transfer of the State's right, title, and interest in and to a highway, or portion thereof, to a city or county.

Resurfacing: A supplemental surface or replacement placed on an existing pavement to restore its riding qualities or increase its strength.

Ridesharing: Transportation system management (TSM) technique providing the systems and management to facilitate carpooling, vanpooling, buspooling and increasing transit usage.

Right-of-Way: Real estate acquired for transportation purposes, which includes the facility itself (highway, fixed guideway, etc.) as well as associated uses (maintenance structures, drainage systems, roadside landscaping, etc.).

Roadbed: That portion of the roadway extending from curb line to curb line or shoulder line to shoulder line. Divided highways are considered to have two roadbeds.

Roadside: A general term denoting the area adjoining the outer edge of the roadbed. Areas between the roadbeds of a divided highway may also be considered roadside.

Roadway: That portion of the highway included between the outside lines of the sidewalks, or curbs and gutters, or side ditches including also the appertaining structures, and all slopes, ditches, channels, waterways, and other features necessary for proper drainage and protection.

Road Weather Information Systems (RWIS): This ITS system collects pavement temperature, visibility, wind speed and direction and precipitation data and presents the data in a useable format to transportation system operators, potentially for the travelling public.

Ss

Safety Index: The traffic Safety Index is a tool for evaluating safety benefits which provides a measure of the accident dollars saved by the motorist expressed as a percentage of the sum of right-of-way (R/W) and construction costs.

Safety Roadside Rest: A roadside area provided for motorists to stop and rest for short periods. It includes paved parking areas, drinking water, toilets, tables, benches, telephones, information panels, and may include other facilities for motorists.

Scenic Corridor: A band of land which is visible from and generally adjacent to, but outside of, the highway right of way having scenic, historical, or other aesthetic characteristics.

Scenic Highway: An officially designated portion of the State Highway System traversing areas of outstanding scenic beauty and/or historic character. Designations include: All-American Road, National Scenic Byway, U.S. Forest Service Byway, Historic Highway and State Scenic Highway.

Segment: A portion of highway identified for analysis that is homogenous in nature.

Separate Turning Lane: An auxiliary lane for traffic in one direction, which has been physically separated from the intersection area by a traffic island.

Shoulder: The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses.

Signalized Intersection: A place where two roadways cross and have a signal controlling traffic movements.

Skew Angle: The complement of the acute angles between two centerlines which cross.

Spacing: The distance between consecutive vehicles, in a given lane, measured front to front.

Speed Change Lane: An auxiliary lane, including tapered areas, primarily for the acceleration or deceleration of vehicles entering or leaving the through traffic lanes.

State Freeway and Expressway System: The Statewide system of highways declared by the Legislature to be essential to the future development of California.

State Highway Operation and Protection Program: A four-year program limited to projects related to state highway safety and rehabilitation.

State Implementation Plan (SIP): Plan required by the Federal Clean Air Act of 1970 to attain and maintain national ambient air quality standards.

State Routes: State highways within the State, other than Interstate and US routes, which serve intrastate and interstate travel. These highways can be freeways, expressways or conventional highways.

State Title: Property purchased by the State and held in fee title.

State Transportation Improvement Program (STIP): Biennial document, adopted by the California Transportation Commission (CTC), which provides the schedule of projects for develop over the upcoming five years.

Surface Transportation Assistance Act Network (STAA): The National Network (NN), Terminal Access (TA) and Service Access Route make up this network. These routes allow STAA trucks.

Surface Transportation Assistance Act (STAA) Trucks: This act required states to allow larger trucks on the National Network (NN) which is comprised of the Interstate State plus the non-Interstate System Federal-aid Primary System. "Larger trucks" includes (1) doubles with 28.5-foot trailers, (2) singles with 48-foot semi-trailers and unlimited kingpin-to-rear axle (KRPA) distance, (3) unlimited length for both vehicle combinations, and (3) width up to 102 inches.

Tt

Telecommuting: The substitution, either partially or completely, of transportation to a conventional office through the use of computer and telecommunications technologies (telephones, personal computers, modems, facsimile machines, electronic mail, etc.).

Terminal Access (TA) Routes: Terminal Access routes are portions of State routes, local roads, that can accommodate STAA trucks. TA route allow STAA trucks to (1) travel between NN routes, (2) reach a truck's operating facility, or (3) reach a facility where freight originates, terminates, or is handled in the transportation process.

Terrain: The surface features of an area of land; topography. In capacity analysis, classification into one of three categories: flat, rolling or mountainous.

Three C Process (3C): "Continuing, cooperative and comprehensive" planning process. Required of metropolitan planning organizations (MPOs) as a condition for receiving federal capital or operation assistance.

Traffic Accident Surveillance and Analysis System (TASAS): A system that provides a detailed list and/or summary of accidents that have occurred on highways, ramps, or intersections in the State Highway System, Accidents can be selected by location, highway characteristics, accidents data codes or any combinations of these.

Traffic Conditions: Any characteristics of the traffic stream that may affect capacity or operation, including the percentage composition of the traffic stream by vehicle type and driver characteristics (such as the differences between weekday commutes and recreational drivers).

Traffic Lane: The portion of the traveled way for the movement of a single line of vehicles.

Traffic Markings: All lines, words, or symbols (except signs) officially placed within the roadway to regulate, warn, or guide traffic.

Traffic Sign: A device mounted on a fixed or portable support, conveying a message or symbol to regulate, warn, or guide traffic.

Traffic Signal: A traffic control device regulating the flow of traffic with green, yellow and red phases.

Transit: Generally refers to passenger service provided to the general public along established routes with fixed or variable schedules at published fares. Relate terms include: public transit, mass transit, public transportation, urban transit and paratransit.

Transportation Concept Report (TCR): Planning document that identifies current operating conditions, future deficiencies, route concept, concept level of service (LOS) and conceptual improvements for a route or corridor.

Transportation Control Measure (TCM): A measure intended to reduce pollutant emissions from motor vehicles. Examples of TCMs include programs to encourage ridesharing or public transit usage, city or county trip reduction ordinances and the use of cleaner burning fuels in motor vehicles.

Transportation Demand Management (TDM): "Demand-based" techniques for reducing traffic congestion, such as ridesharing programs and flexible work schedules enabling employees to commute to and from work outside of the peak hours.

Transportation Equity Act for the 21st Century (TEA21): As an addition to Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, TEA21, which was enacted June 9, 1998, authorizes highway, highway safety, transit and other surface transportation programs for the following 6 years.

Transportation Improvement Program (TIP): Federally required annual schedule of projects for transportation development for the upcoming five years. A project must be in the appropriate regional-Federal TIP to receive Federal or CTC funding.

Transportation Management Center (TMC): A focal point that can monitor traffic and road conditions, as well as train and transit schedules, and airports and shipping advisories. From here, information about accidents, road closures and emergency notification is relayed to travelers.

Transportation Permits: The Department of Transportation has the discretionary authority to issue special permits for the movement of vehicles/loads exceeding statutory limitations on the size, weight and loading of vehicles contained on Division 15 of the California Vehicle Code. Requests for such special permits requires the completion of an application for a Transportation Permit from the office Traffic Operations-Transportation Permits. Route Classes for length are labeled yellow, green, blue, brown and red. Route Classes for weight are labeled purple, orange and green. See http://www.dot.ca.gov/hq/traffops/permits/ for more information.

Transportation Stakeholder: In transportation, stakeholders include FHWA, CTC, RTPAs, transportation departments, transportation commissions, cities and counties, Native American Tribal Governments, economic development and business interests, resource agencies, transportation interest groups, the public and the Legislature.

Transportation System Development Program (TSDP): A TSDP identifies a reasonable, comprehensive and effective range of transportation improvements on state highways. It is the Department's statement of priorities for improvements in negotiating and joint planning with regional agencies.

Transportation System Management (TSM): TSM is 1) a process oriented approach to solving transportation problems considering both long and short range implications; and 2) a services and operations process oriented in which low capital, environmentally-responsive, efficiency-maximizing improvements are implemented on existing facilities.

Travel Way: The portion of the roadway for the movement of vehicles, exclusive of shoulders.

Troposphere Ozone: Formed when reactive organic gases (ROG) and nitrogen oxides react in the presence of sunlight. ROG sources include any source that burns fuels, solvents, petroleum processing and storage and pesticides.

Two Way Stop Control: Traffic control at an intersection where the minor approaches are controlled by stop signs but the major street is not.

Typical Section: Depiction of the basic (or typical) design elements/features for an existing or planned facility. Typical sections can be prepared for a variety of facilities, including: highway sections, lane transition areas, medians, interchanges, pavement structural sections, bike paths and drainage systems.

Uu

US Department of Transportation: The principal direct Federal funding agency for transportation facilities and programs. Includes the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the Federal Railroad Administration (FRA), and other.

US Route: A network of highways of statewide and national importance. These highways can be freeways, expressways or conventional highways.

Vv

Vehicle Miles Traveled (VMT): Used in trend analysis and forecasts. (1) On highways, a measurement of the total miles traveled in all vehicles in the area for a specific time period. It is calculated by the number of vehicles multiplied by the miles traveled in a given area or on a given highway during the time period. (2) In transit, the number of vehicle miles operated on a given router or line or network during a specific time period.

Vehicle Occupancy: The number of people aboard a vehicle at a given time; also known as auto or automobile occupancy when the reference is to automobile travel only.

Vista Point: A paved area beyond the shoulder, which permits travelers to safely exit the highway to stop and view a scenic area. In addition to parking areas, trash receptacles, interpretive displays, and in some cases rest rooms, drinking water and telephones may be provided.

Volume: The number of vehicles passing a given point during a specified period of time.

Volume/Capacity Ratio (V/C Ratio): The ratio of flow rate to capacity for a transportation facility.

Ww

Weaving:. The crossing of traffic streams, moving in the same general direction, accomplished by merging and diverging.

Weaving Section: A length of roadway over which traffic streams cross paths through lane-changing maneuvers, at one end of which two one-way roadways merge and at the other end of which they separate.

Weigh-in Motion (WIM): Technology that determines a vehicle's weight without requiring it to stop on a scale.

Appendix B: Public Outreach Plan

PLUMAS COUNTY

INCORPORATED CITY: PORTOLA

The Plumas County Regional Transportation Planning Agency is responsible for transportation planning in Plumas County. The RTPA is governed by a six member Local Transportation Commission composed of the following members: Portola City Council (3), Plumas County Board of Supervisors (3). RTPA staff is provided by the Plumas County Public Works Department. While the RTPA does not have a standing Technical Advisory Committee it does solicit involvement of other public and private agencies, Native American Tribes and the general public.

DATE	FORMAT	KEY CONTACTS	OTHER ATTENDEES
April 26, 2001	Meeting	Plumas County Public Works Department Marty Byrne, Assistant Director of Public Works John Mannle, Assistant Transportation Planner 1834 East Main Street Quincy, CA 95971	Andrea Fields, Caltrans Kathy Grah, Caltrans Dick Richards, Caltrans Scott White, Caltrans
April 26, 2001 June 26, 2001	Meeting	Plumas County Planning Department Steve Allen, Supervising Senior Planner 520 Main Street, Room 121 Quincy, CA 95971-9366	Kathy Grah, Caltrans Scott White, Caltrans
April 26, 2001 June 27, 2001	Interview	Plumas County Museum Evelyn Whistman 500 Jackson Street Quincy, CA 95971	Kathy Grah, Caltrans Scott White, Caltans
June 27, 2001	Meeting	City of Portola Jim Murphy, City Administrator 35 Third Avenue Portola, CA 96122	Kathy Grah, Caltrans Scott White, Caltrans Karen Downs, Wade & Associates Planning Lee Wilburn, Superint. Of Public Works
August 27, 2001	Meeting	Plumas County Supervisors Supervisor Robert Meacher (Greenville) Supervisor Don Clark (Graeagle)	Kathy Grah, Caltrans Scott White, Caltrans
September 10, 2001	Presentation	Plumas County Transportation Commission Public Works Department 1834 East Main Street Quincy, CA 95971-9366	Andrea Fields, Caltrans Kathy Grah, Caltrans Scott White, Caltrans
October 4, 2001	Public Workshop	Graeagle Firehall 7620 Highway 89 Graeagle, CA 96013	Kathy Grah, Caltrans Scott White, Caltrans (16 public attendees)
October 4, 2001	Public Workshop	Greenville Townhall 120 Bidwell Street Greenville, CA 95947	Kathy Grah, Caltrans Scott White, Caltrans (14 public attendees)
November 19, 2001	Presentation	Plumas County Transportation Commission Public Works Department 1834 East Main Street Quincy, CA 95971-9366	Kathy Grah, Caltrans Scott White, Caltrans
December 10, 2001	Presentation	Plumas County Transportation Commission Public Works Department 1834 East Main Street Quincy, CA 95971-9366	Kathy Grah, Caltrans Dick Richards, Caltrans Scott White, Caltrans

TEHAMA COUNTY

INCORPORATED CITIES: TEHAMA, CORNING, RED BLUFF

The Tehama County Regional Transportation Planning Agency is responsible for transportation planning in Tehama County. The RTPA is governed by a six member Local Transportation Commission composed of the following members: Tehama City Council (1), Corning City Council (1), Red Bluff City Council (1), Tehama County Board of Supervisors (3). RTPA staff is provided by the Tehama County Public Works Department. The RTPA has a Technical Advisory Committee composed of the following members: City of Red Bluff (Director of Public Works, City of Red Bluff (City Manager), Tehama County (Deputy Director of Public Works), City of Corning (City Manager), City of Corning (Director of Public Works), City of Tehama (Mayor), Tehama Rural Area Express (Transit Manager), Tehama RTPA (Executive Director), Tehama RTPA (Transportation Planner), Caltrans District 2.

Date	Format	Key Contacts	Other Attendees
June 25, 2001	Meeting	Tehama County RTPA Staff Gary Plunkett, Executive Officer Kevin Rosser, Transportation Planner Barbara O'Keeffe, Transit Manager Tim Bollmann, Transportation Planner 9380 San Benito Avenue Gerber, CA 96035	Andrea Fields, Caltrans Kathy Grah, Caltrans Scott White, Caltrans
October 10, 2001	Presentation	Tehama County Technical Advisory Committee Red Bluff Court House Annex 444 Oak Street Red Bluff, CA 96080	Kathy Grah, Caltrans Scott White, Caltrans
November 20, 2001	Presentation	Tehama County Transportation Commission Tehama County Public Works Department 9380 San Benito Avenue Gerber, CA 96035	Kathy Grah, Caltrans Scott White, Caltrans
January 15, 2001	Presentation	Tehama County Transportation Commission Tehama County Public Works Department 9380 San Benito Avenue Gerber, CA 96035-9702	Kathy Grah, Caltrans Scott White, Caltrans

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SHASTA COUNTY

INCORPORATED CITIES: ANDERSON, REDDING, SHASTA LAKE

The Shasta County Regional Transportation Planning Agency is responsible for transportation planning in Shasta County. The Shasta County RTPA is composed of the following seven members: Anderson City Council (1), Redding City Council (1), Shasta Lake City Council (1), Redding Area Bus Authority (!), Shasta County Board of Supervisors (3). The RTPA has a Technical Advisory Committee composed of the following members: Shasta County staff (2), Anderson City staff (2), Redding City staff (2), Shasta Lake City staff (2), Shasta County Air Quality Management District, Redding Area Bus Authority (1), Redding area airports (1), Caltrans District 2 (1).

Date	Format	Key Contacts	Other Attendees
June 19, 2001	Meeting	Shasta County Regional Planning Agency Dan Kovaich, Executive Director 1855 Placer Street Redding, CA 96001	Nick Deal, Caltrans Kathy Grah, Caltrans Scott White, Caltrans
September 12, 2001	Meeting	Shasta County Supervisors Supervisor Trish Clarke Supervisor Glenn Hawes	Kathy Grah, Caltrans
September 25, 2001	Presentation	Shasta County Board of Supervisors Shasta County Courthouse 1500 Court Street Redding, CA 96001	Kathy Grah, Caltrans Scott White, Caltrans

October 16, 2001	Public Workshop	Burney Lion's Hall 37006 Main Street Burney, CA 96013	Nicholas Deal, Caltrans Kathy Grah, Caltans Dave Moore, Caltrans Scott White, Caltrans (11 public attendees)
October 23, 2001	Presentation	Shasta County RTPA Shasta County Courthouse 1500 Court Street Redding, CA 96001	Kathy Grah, Caltrans Scott White, Caltrans
December 11, 2001	Presentation	Shasta County RTPA Shasta County Courthouse 1500 Court Street Redding, CA 96001	Kathy Grah, Caltrans Scott White, Caltrans

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SISKIYOU COUNTY

INCORPORATED CITIES: DORRIS, DUNSMUIR, ETNA, FORT JONES, MONTAGUE, MT. SHASTA CITY, TULELAKE, WEED AND YREKA.

The Siskiyou County Regional Transportation Planning Agency is responsible for transportation planning in Siskiyou County. The RTPA is governed by a six member Local Transportation Commission composed of the following members: Dorris City Council (1), Fort Jones City Council (1), Yreka City Council (1), Siskiyou County Board of Supervisors (3). RTPA staff is provided by the Siskiyou County Public Works Department. While the RTPA does not have a standing Technical Advisory Committee, there is a League of Cities involving all nine cities that serves a similar purpose.

Date	**Format**	**Key Contacts**	**Other Attendees**
June 4, 2001	Meeting	Siskiyou County Public Works Dave Gravenkamp, Director of Public Works Brian McDermott, Deputy Director 305 Butte Street Yreka, CA 96097	Kathy Grah, Caltrans, Scott White, Caltrans Marlene Woods, Caltrans
June 28, 2001	Meeting	McCloud Services District Pete Kampa, Director 220 West Minnesota McCloud, CA	Kathy Young, Maryanne Terry Dennis Terry, Tim Johnson & Roy Hartgraves Kathy Grah, Caltrans Scott White, Caltrans
June 28, 2001	Meeting	Siskiyou County Planning Department John Jarecki, Assistant Planner 311 Fourth Street Yreka, CA 96097	Kathy Grah, Caltrans Scott White, Caltrans
August 20, 2001	Meeting	Mt. Shasta City Officials LaVada Erickson, Supervisor Marge Apperson, Mayor Joe Riker, City Administrator Mike Workman, Director of Public Works Keith McKinnely, Assistant Director of Public Works Conference Room Above Police Dept. Lake/Mt. Shasta Boulevard Yreka, CA 96097	Kathy Grah, Caltrans Scott White, Caltrans
August 20, 2001	Meeting	McCloud Services District Pete Kampa, Director Joan Smith, Supervisor Brian McDermott, Deputy Director	Mirella Wilson, Chamber of Commerce Scott White, Caltrans Kathy Grah, Caltrans Roberta McLaughlin, Caltrans
October 11, 2001	Public Workshop	McCloud Scout Hall 405 East Colombero Drive McCloud, CA 96057	Kathy Grah, Caltrans Scott White, Caltrans (17 public attendees)

October 18, 2001	Public Workshop	Mt. Shasta Community Center 629 Alder Street Mt. Shasta, CA 96067	Karl Anderson, Caltrans Shari Armentrout, Caltrans Kathy Grah, Caltrans Scott White, Caltrans James Woods, Caltrans (14 public attendees)
November 6, 2001	Presentation	Siskiyou County Transportation Commission 311 Fourth Street (Courthouse-Board of Supervisors Chambers Yreka, CA 96097	Kathy Grah, Caltrans Scott White, Caltrans
January 15, 2001	Presentation	Siskiyou County Transportation Commission 311 Fourth Street (Courthouse-Board of Supervisors Chambers Yreka, CA 96097	Kathy Grah, Caltrans Scott White, Caltrans

CALIFORNIA INDIAN RESERVATIONS AND RANCHERIAS

Native American tribes are separate and independent political communities within the territorial boundaries of the United States. Tribes promulgate and administer their own laws. In addition to standard governmental functions such as regulating, taxing and delivering services, tribal governments are also responsible for the development, management and operation of tribal economic enterprises. There are two tribal governments along SR 89: Greenville Rancheria and Pit River Tribe.

Date	Format	Key Contacts	Other Attendees
August 8, 2001	Letter	Greenville Rancheria	
October 8, 2001	Phone Conversation	P.O. Box 279	
October 16, 2001	Letter	Greenville, CA 95947	
December 5, 2001	Letter/Draft		
August 8, 2001	Letter	Pit River Tribe	
September 26, 2001	Letter	37014 Main Street	
October 23, 2001	Letter	Burney, CA 96013	
December 5, 2001	Letter/Draft		

OTHER PRIVATE & PUBLIC ENTITIES

The following private and public entities were contacted during the development of the TCR.

Alliance for Workforce Development
American Valley Pathways
Burlington-Northern Sante Fe Railroad
Burney Chamber of Commerce
Burney Transport
California Cedar Products
California Department of Forestry
California Highway Patrol
California Trucking Association
Cal Works Employment Services
Collins Pine Lumber
Eastern Plumas County Chamber of Commerce
Fall River Chamber of Commerce
Golden Umbrella, Inc.
Gold Mountain
Graeagle Land and Water
Indian Valley Chamber of Commerce
Indian Valley Community Service District
Intermountain Chamber of Commerce
Lassen Volcanic National Park
McCloud Chamber of Commerce
McCloud Railway (Shasta Sunset Dinner Train)
McCloud Service District
Mt. Lassen Motor Transit
Mt. Shasta Board & Ski Park
Mt. Shasta Chamber of Commerce
Mt. Shasta Resort
Muse Trucking
North Valley Catholic Social Services
Pacific Gas and Electric
Plumas Corporation
Plumas County Visitors Bureau
Plumas County Public Health Agency
Plumas County Senior Services
Plumas National Forest
Portola City Council
Shasta County Sheriff
Shasta County Planning Department
Shasta County Economic Development Corporation
Sierra Pacific Industries
Siskiyou County Economic Development Council
Siskiyou County Visitors Bureau
Siskiyou Workforce Connection
Tehama County Chamber of Commerce
Tehama County Planning Department
Tehama Local Development Commission
Union Pacific Railroad

Appendix C: Capacity Analysis and Level of Service

Methodology:
The standard reference in highway capacity analysis is the **Highway Capacity Manual 2000** prepared by the Transportation Research Board (National Research Council, Washington, D.C.). The Highway Capacity Manual 2000 (HCM 2000) is a collection of the state-of-the-art techniques for estimating the capacity and determining the level of service for transportation facilities. The HCM 2000 represents a systematic and consistent basis for evaluating transportation facilities with procedures that are applicable nation-wide. The HCM 2000 builds upon and expands the procedures and methodologies put forth in the 1950, 1965, 1985, 1994, 1997 manuals as well as other related research projects.

Capacity Analysis:
The set of procedures and methodologies used for estimating the traffic-carrying ability of various transportation facilities is broadly referred to as capacity analysis. ***A principal objective of capacity analysis is to estimate the number of vehicles that a facility can accommodate during a specified period of time. Capacity analysis is also used to estimate the maximum amount of traffic that a facility can accommodate while maintaining a prescribed level of operation.*** Common outputs of capacity analysis are estimates of the quality of operation (level of service) for a given facility.

Capacity:
The capacity of a facility is the maximum hourly rate at which persons or vehicles reasonably can be expected to traverse a point or uniform section of lane or roadway during a given time period under prevailing roadway, traffic and control conditions. It represents the flow rate that can be achieved during peak periods of demand. Capacity is affected by a number of factors such as lane and shoulder widths, density of access points, interchange spacing, grade, and types of vehicles in the traffic stream. Capacity values are determined differently by mode (auto, bus, pedestrian, bicycle) and by facility (freeway, highway, urban street, intersection, etc.).

Level of Service:
Level of Service (LOS) is a qualitative measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. Six LOS are defined for each type of facility analyzed. Letters designate each level, from "A" to "F", with LOS "A" representing the best operating conditions and LOS "F" the worst.

Methodologies:
The HCM 2000 contains analytical methodologies for the following situations: urban streets, signalized intersections, unsignalized intersections, pedestrians, bicycles, two-lane highways, mulitlane highways, freeway facilities, basic freeway segments, freeway weaving, ramps, interchanges and transit. *Capacity and level of service is determined differently for each facility type, so direct comparisons across facility types should not be made*.

Two-Lane Highway Methodology – Chapter 20, HCM 2000:
The two-lane highway methodology is applicable to State Route 89. A two-lane highway is an undivided roadway with two lanes, one for use by traffic in each direction. On a two-lane undivided highway, traffic flow is affected by a number of factors, including geometric conditions (curvature, lane widths, shoulder widths, etc.), sight distance and grade. Traffic flow in one direction is also influenced by traffic flow in the other direction. Travel speeds fall and time spent following other vehicles rises as volumes increase and traffic in the opposing direction reduces opportunities to pass.

The performance measures used to determine level of service for two-lane highways are percent time spent following, average travel speed and percent of expected speed. Percent time spent following is the average percentage of travel time that vehicles must travel in platoons behind slower vehicles due to the inability to pass. Average travel speed is the average of the travel time of all vehicles over a designated interval. Percent of expected speed is the ratio of average travel speed to free flow speed (approximately equal to posted speed) over a designated interval.

For purposes of analysis, two-lane highways are divided into three classes based on the primary type of use and driver expectations:[1]

Class I –
These are two-lane highways on which motorists expect to travel at relatively high speeds. Two-lane highways that are major inter-city routes, primary arterials connecting major traffic generators, or primary links in state or national highway networks generally are assigned to Class I.

Class II –
These are two-lane highways on which maintaining high travel speeds are not necessarily the most important objective of motorists. Two-lane highways that serve as scenic or recreational routes, are not primary arterials, or pass through rugged terrain generally are assigned to Class II.

Class III –
Class III is applicable in situations where a two-lane highway (otherwise class I or II) passes through a small town or other developed area. In these situations motorists primarily want to proceed at a reasonable speed and generally do not expect to have an opportunity to pass.

The level of service (LOS) for Class I highways is defined in terms of both percent time spent following and average travel speed. For Class II facilities, the LOS is defined only in terms of percent time spent following. The LOS on Class III segments is defined in terms of percent of expected speed. The tables below provide the criteria (break-points) for level of service for each facility type.[2]

LEVEL OF SERVICE CRITERIA FOR TWO-LANE HIGHWAYS IN CLASS I		
LOS	**Percent Time Spent Following**	**Average Travel Speed (mi/h)**
A	≤ 35	> 55
B	> 35-50	> 50-55
C	> 50-65	> 45 –50
D	> 65-80	> 40-45
E	> 80	≤ 40
F	Vehicle flow rate exceeds capacity	

LEVEL OF SERVICE CRITERIA FOR TWO-LANE HIGHWAYS IN CLASS II	
LOS	**Percent Time Spent Following**
A	≤ 35
B	> 35-50
C	> 50-65
D	> 65-80
E	> 80
F	Vehicle flow rate exceeds capacity

LEVEL OF SERVICE CRITERIA FOR TWO-LANE HIGHWAYS IN CLASS III	
LOS	**Percent of Expected Speed**
A	> .92
B	> .83
C	> .75
D	> .67
E	> .58
F	< .58

For purposes of capacity analysis, State Route 89 was given the following classifications:

State Route 89 Classification for Capacity Analysis	
Class	**Segments**
I	10, 11, 12, 13, 14, 15
II	1,3,4,5,7,8,9
III	2, 6

1. The methodology in Chapter 20 of the HCM 2000 addresses two classes of two-lane highways, Class I and Class II. In most instances, the procedures for the two classes provide satisfactory results. In small developed communities, however, where typical travel speeds are less than 45 miles per hour, neither the Class I nor the Class II methodology can be applied successfully. For this reason, the California Department of Transportation, District 2 Office of System Planning has been working with the Florida Department of Transportation (FDOT) and University of Florida to test a Class III methodology. The FDOT has submitted this methodology for presentation at the 81st Annual Meeting of the Transportation Research Board. It is anticipated that at that time it will be approved for use along with the current Class I and Class II procedures.
2. Source: Highway Capacity Manual 2000 and Florida Department of Transportation Quality/Level of Service Handbook (2001 Draft).

Appendix D: Air Quality

Air Quality

Air quality is a general term used to describe various aspects of the air that plants and human populations are exposed to in their daily lives. A variety of contaminants including particulates (PM10) and gaseous pollutants such as carbon monoxide (CO), nitrogen oxides (NOX), hydrocarbons (HC) and troposphere ozone (O3) can degrade air quality.

The Federal Clean Air Act (CAA) forms the basis for the national air pollution control effort. A basic element of the CAA is the National Ambient Air Quality Standards (NAAQS), which require that certain pollutants do not exceed specified levels. Areas with levels that exceed the standard for specific pollutants are designated as "non-attainment areas." In order to receive transportation funding or approvals from the Federal Highway Administration (FHWA) or Federal Transit Administration (FTA), State and local transportation agencies in a "non-attainment area" must meet conformity requirements set forth in the CAA.

SR 89 is located within three air basins: Mountain Counties, Sacramento Valley and Northeast Plateau. Currently, the three air basins are classified as attainment for ozone and PM_{10} for Federal CAA. All four counties do not meet the State standard for PM_{10}. Shasta and Tehama Counties, however, are pending non-attainment for Federal 8-hour ozone. Table 12 provides general information regarding air quality designations. Specific air quality information should be obtained from the District 2 Regional/Air Quality Planning Office or appropriate Air Quality District (Northern Sierra Air Quality Management District, Tehama County Air Pollution Control District, Shasta County Air Quality Management District, and Siskiyou County Air Pollution Control District).

Table 18: Air Quality Designations

County	Air Basin	Air Quality District	State Designations			Federal Designations		
			Ozone -1 hour	Ozone -8 hour	PM_{10}	Ozone -1 hour	Ozone -8 hour	PM_{10}
Plumas	Mountain Counties	Northern Sierra AQMD	UC	UC	NA	UC/A	UC/A	UC
Tehama	Sacramento Valley	Tehama County APCD	NA	NA	NA	A	*	UC
Shasta	Sacramento Valley	Shasta County AQMD	NA	NA	NA	A	*	UC
Siskiyou	Northeast Plateau	Siskiyou County APCD	A	A	NA	UC/A	UC/A	UC

NA=Nonattainment (Does not meet standard)
A=Attainment (Meets standard)
UC=Unclassified (Not measured)
*Pending Nonattainment Designation

Sources: Environmental Protection Agency and Air Quality Management Districts

Appendix E: Alternate Facilities near State Route 89

Seg	Co	Street	From	To	Functional Class	Length Miles	AADT
1	Plu	Golden Lake Forest Highway	Sierra County Line	SR 89	Rural Major Collector	7.565	794
1	Plu	Portola McLears Road (County Road A-15)	SR 89	Plumas National Forest with Main	Rural Minor Collector	6.360	724
2	Plu	Graeagle-Johnsonville Road	Church Street	SR 89	Rural Major Collector	5.690	3138
3	Plu	Arlington Road (County Road A-22)	SR 89	Genesee Road	Rural Major Collector	4.460	1255
4	Plu	Stampfli Lane	SR 89	North Valley Road	Rural Minor Collector	3.040	982
6	Plu	Greenville-Wolf Creek Road	SR 89 @ Main Street	Setzer Camp Road	Rural Minor Collector	2.580	310
6	Plu	Setzer Camp Road	Greenville-Wolf Creek Road	SR 89	Rural Minor Collector	0.110	2543
8	Plu	Almanor Drive West	SR 89	Prattville Butt Reservoir Road	Rural Minor Collector	2.250	269
8	Plu	Almanor Drive West	SR 89	Prattville Butt Reservoir Road	Rural Major Collector	1.800	1098
8	But	Humboldt Road/ Humbug Road to Humboldt-Humbug Cross Road	Butte County Line	SR 89			
8	Plu	Prattville Butt Reservoir Road	Seneca Road	SR 89	Rural Minor Collector	9.530	569
8	Plu	Prattville Butt Reservoir Road	SR 89	Almanor Drive West	Rural Major Collector	0.585	706
9	Teh	Lassen National Forest Service Road	SR 89	Minnesota Avenue	Rural Minor Collector	0.300	1044
10	Sha	Cassel Road	SR 89	SR 299	Rural Major Collector	6.970	550
12	Sha	McArthur Road (County Road A-19)	SR 89	SR 299	Rural Major Collector	17.10	823
13	Sis	Old Camp Two Road	SR 89	Davis Road	Rural Minor Collector	6.250	641
15	Sis	Broadway	SR 89	Minnesota Avenue	Rural Minor Collector	0.075	4849
15	Sis	Mt. Shasta Boulevard	SR 89	Ream Avenue	Rural Minor Collector	1.290	6327
15	Sis	West Colombero Drive	SR 89	Broadway	Rural Minor Collector	1.032	1902
15	Sis	West Minnesota Avenue	SR 89	Minnesota Avenue	Rural Minor Collector	0.300	1044
1	Sis	Southern Avenue	SR 89	Shasta County Line	Rural Minor Collector	5.700	2161

Appendix F: Local and Regional Plans

The following documents were used during the preparation of the District 2 State Route 89 TCR:

Regional Transportation Plans:
Plumas County Regional Transportation Plan, 2000
Tehama County Regional Transportation Plan, 1998
Shasta County Regional Transportation Plan, 1998
Siskiyou County Regional Transportation Plan, 1998

General Plans:

Plumas County General Plan, 1989
Tehama County General Plan, 1983
Shasta County General Plan, 1995
Siskiyou County General Plan, 1980

Other Documents:

California Fast Facts, California Department of Tourism, 2001
Economic and Demographic Profile Series, 2001 (Plumas, Tehama, Shasta and Siskiyou Counties)
General Management Plan and Environmental Impact Statement-Lassen Volcanic National Park, August 2001

Appendix G: Adjoining District and State Plans

District 3

State Route 89 Transportation Concept Report Abstract

Within District 3, State Route 89 is mainly a two-lane highway, which runs 87.4 miles northward from the El-Dorado-Alpine County line to the Sierra-Plumas County line. State Route 89 passes through El Dorado, Placer, Nevada, and Sierra Counties, providing access to the Lake Tahoe and Truckee River Basins.

State Route 89 is a mixture of local, visitor and interregional traffic. State Route 89 provides an important link between the north and south shore areas of the Tahoe Region. Traffic volumes on State Route 89 vary considerably by the season, with peak monthly traffic volumes considerably higher that Annual Average Daily Traffic (AADT). This is especially true with the segments in the Tahoe Region.

The facility concept for SR 89 to the south of District 2 in Sierra County (District 3) is a two-lane expressway and conventional highway in mountainous terrain. SR 89 in Sierra County serves residential, recreational, commercial and ranching interests in the region. The 20-year Concept LOS is D. The current Level of Service (LOS) for this segment is C. The 20-year no build LOS is C. The facility concept and concept LOS for SR 89 at the District 3/District 2 boundary are consistent.

RESOLUTIONS

RESOLUTION NO. 01-13

RESOLUTION OF THE PLUMAS COUNTY TRANSPORTATION COMMISSION CONCURRING WITH THE TRANSPORTATION CONCEPT REPORT FOR STATE ROUTE 89

WHEREAS, the Plumas County Transportation Commission (PCTC) is the Regional Transportation Planning Agency for Plumas County and is responsible for regional transportation planning, which includes the functional relationship between the local road system and State highway system; and

WHEREAS, the California Department of Transportation, District 2 (District) is responsible for the planning, construction and operation of the State Highway system, which includes the functional relationship between the State highway system and local road system;

WHEREAS, District 2 in cooperation with the PCTC has prepared a Transportation Concept Report for State Route 89 which sets forth a conceptual plan for the development and operation of the highway for the next twenty years; and

WHEREAS, preparation of the State Route 89 Transportation Concept Report also involved local elected officials, city and county staff, community organizations, State and Federal agencies, Native American Tribes, the general public and many other organizations; and

WHEREAS, the State Route 89 Transportation Concept Report identifies operational and capacity improvements that will be necessary to maintain desired operating conditions/level of service over the twenty year planning horizon; and

WHEREAS, the State Route 89 Transportation Concept Report also identifies improvements on or near the State highway system that will facilitate regional or local development, improve local circulation and enhance quality of life; and

WHEREAS, implementation of many of the improvements identified in the Transportation Concept Report will require funding and delivery partnerships between the District and its local and regional partners.

NOW, THEREFORE, BE IT RESOLVED by the Plumas County Transportation Commission that the State Route 89 Transportation Concept Report presents a balanced and logical concept for the development and operation of State Route 89 over the next twenty years.

NOW, THEREFORE, BE IT FURTHER RESOLVED by the Plumas County Transportation Commission that the State Route 89 Transportation Concept Report should be considered during preparation of the Regional Transportation Improvement Program and Interregional Transportation Improvement Program.

NOW, THEREFORE, BE IT FURTHER RESOLVED by the Plumas County Transportation Commission that Bill Powers, Chairman is hereby authorized to sign the "Concurrence" block on the signature sheet for the State Route 89 Transportation Concept Report

PASSED AND ADOPTED by the Plumas County Transportation Commission at a regular meeting of said Commission held on the 10th of December, 2001 by the following vote:

AYES: KENNEDY, ADAMSON, CLARK, MEACHER, POWERS

NOES: NONE

ABSENT: DENNISON

Chairman, Plumas County Transportation Commission

ATTEST: Martin J. Byrne

Martin J. Byrne, Exec. Director

12-10-01
Date

RESOLUTION NO. 1-2002

RESOLUTION OF THE TEHAMA COUNTY TRANSPORTATION COMMISSION CONCURRING WITH THE TRANSPORTATION CONCEPT REPORT FOR STATE ROUTE 89

WHEREAS, the Tehama County Transportation Commission is the Regional Transportation Planning Agency for Tehama County and is responsible for regional transportation planning, which includes the functional relationship between the local road system and State highway system; and

WHEREAS, the California Department of Transportation, District 2 (Caltrans) is responsible for the planning, construction, and operation of the State Highway system, which includes the functional relationship between the State highway system and local road system;

WHEREAS, District 2 in cooperation with the Tehama County Transportation Commission has prepared a Transportation Concept Report for State Route 89 which sets forth a conceptual plan for the development and operation of the highway for the next twenty years; and

WHEREAS, preparation of the State Route 89 Transportation Concept Report also involved local elected officials, city and county staff, community organizations, State and Federal agencies, Native American Tribes, the general public and many other organizations; and

WHEREAS, the State Route 89 Transportation Concept Report identifies operational and capacity improvements that will be necessary to maintain desired operating conditions/level of service over the twenty year planning horizon; and

WHEREAS, the State Route 89 Transportation Concept Report also identifies improvements on or near the State highway system that will facilitate regional or local development, improve local circulation and enhance quality of life; and

WHEREAS, implementation of many of the improvements identified in the Transportation Concept Report will require funding and delivery partnerships between the District and its local and regional partners.

NOW, THEREFORE, BE IT RESOLVED by the Tehama County Transportation Commission that the State Route 89 Transportation Concept Report presents a balanced and logical concept for the development and operation of State Route 89 in Tehama County over the next twenty years.

NOW, THEREFORE, BE IT FURTHER RESOLVED by the Tehama County Transportation Commission that the State Route 89 Transportation Concept Report should be considered during preparation of the Regional Transportation Improvement Program and Interregional Transportation Improvement Program.

NOW, THEREFORE, BE IT FURTHER RESOLVED by the Tehama County Transportation Commission that the Executive Director is hereby authorized to sign the "Concurrence" block on the signature sheet for the State Route 89 Transportation Concept Report

The foregoing Resolution was offered by Commissioner Turner, seconded by Commissioner Warner, at a regular meeting in Red Bluff, California, on January 15, 2002 and adopted by the following vote:

AYES: Roush, Warner, Russell, Willard, Stevens, Turner
NOES: None
ABSENT OR NOT VOTING: None

ATTEST: O. GARY PLUNKETT
EXECUTIVE DIRECTOR

BY: _____
Linda Madea
Recording Secretary

ADOPTED JANUARY 15, 2002

_____
Rex Roush
Chairperson

T:\TCTC\PACKET\2002\Jan02\SR89TCR.res.wpd

RESOLUTION NO. 01-09
RESOLUTION OF THE SHASTA COUNTY REGIONAL TRANSPORTATION PLANNING AGENCY CONCURRING WITH THE TRANSPORTATION CONCEPT REPORT FOR STATE ROUTE 89

WHEREAS, the Shasta County Regional Transportation Planning Agency is the Metropolitan Planning Organization for Shasta County and is responsible for regional transportation planning, which includes the functional relationship between the local road system and State highway system; and

WHEREAS, the California Department of Transportation, District 2 (District) is responsible for the planning, construction and operation of the State Highway system, which includes the functional relationship between the State highway system and local road system;

WHEREAS, District 2 in cooperation with the Shasta County RTPA has prepared a Transportation Concept Report for State Route 89 which sets forth a conceptual plan for the development and operation of the highway for the next twenty years; and

WHEREAS, preparation of the State Route 89 Transportation Concept Report also involved local elected officials, city and county staff, community organizations, State and Federal agencies, Native American Tribes, the general public and many other organizations; and

WHEREAS, the State Route 89 Transportation Concept Report identifies operational and capacity improvements that will be necessary to maintain desired operating conditions/level of service over the twenty year planning horizon; and

WHEREAS, the State Route 89 Transportation Concept Report also identifies improvements on or near the State highway system that will facilitate regional or local development, improve local circulation and enhance quality of life; and

WHEREAS, implementation of many of the improvements identified in the Transportation Concept Report will require funding and delivery partnerships between the District and its local and regional partners.

NOW, THEREFORE, BE IT RESOLVED by the Shasta County Regional Transportation Planning Agency that the State Route 89 Transportation Concept Report presents a balanced and logical concept for the development and operation of State Route 89 over the next twenty years.

NOW, THEREFORE, BE IT FURTHER RESOLVED by the Shasta County Regional Transportation Planning Agency that the State Route 89 Transportation Concept Report should be considered during preparation of the Regional Transportation Improvement Program and Interregional Transportation Improvement Program.

NOW, THEREFORE, BE IT FURTHER RESOLVED that the Executive Officer, Daniel J. Kovacich is hereby authorized to sign the "Concurrence" block on the signature sheet for the State Route 89 Transportation Concept Report.

DULY PASSED AND ADOPTED this 11th day of December 2001, by the Shasta County Regional Transportation Planning Agency.

Norma Comnick, Chair
Shasta County Regional
Transportation Planning Agency

RESOLUTION NO. 02-2

RESOLUTION OF THE SISKIYOU COUNTY LOCAL TRANSPORTATION COMMISSION CONCURRING WITH THE TRANSPORTATION CONCEPT REPORT FOR STATE ROUTE 89

WHEREAS, the Siskiyou County Local Transportation Commission is the Regional Transportation Planning Agency for Siskiyou County and is responsible for regional transportation planning, which includes the functional relationship between the local road system and State highway system; and

WHEREAS, the California Department of Transportation, District 2 (District) is responsible for the planning, construction and operation of the State Highway system, which includes the functional relationship between the State highway system and local road system;

WHEREAS, District 2 in cooperation with the Siskiyou County Local Transportation Commission has prepared a Transportation Concept Report for State Route 89 which sets forth a conceptual plan for the development and operation of the highway for the next twenty years; and

WHEREAS, preparation of the State Route 89 Transportation Concept Report also involved local elected officials, city and county staff, community organizations, State and Federal agencies, Native American Tribes, the general public and many other organizations; and

WHEREAS, the State Route 89 Transportation Concept Report identifies operational and capacity improvements that will be necessary to maintain desired operating conditions/level of service over the twenty year planning horizon; and

WHEREAS, the State Route 89 Transportation Concept Report also identifies improvements on or near the State highway system that will facilitate regional or local development, improve local circulation and enhance quality of life; and

WHEREAS, implementation of many of the improvements identified in the Transportation Concept Report will require funding and delivery partnerships between the District and its local and regional partners.

NOW, THEREFORE, BE IT RESOLVED by the Siskiyou County Local Transportation Commission that the State Route 89 Transportation Concept Report presents a balanced and logical concept for the development and operation of State Route 89 over the next twenty years.

NOW, THEREFORE, BE IT FURTHER RESOLVED by the Siskiyou County Local Transportation Commission that the State Route 89 Transportation Concept Report should be considered during preparation of the Regional Transportation Improvement Program and Interregional Transportation Improvement Program.

NOW, THEREFORE, BE IT FURTHER RESOLVED by the Siskiyou County Local Transportation Commission that the Executive Director is hereby authorized to sign the "Concurrence" block on the signature sheet for the State Route 89 Transportation Concept Report

PASSED AND ADOPTED by the Siskiyou County Local Transportation Commission at a regular meeting of said Commission held on the 15th day of January 2002, by the following vote:

AYES: Andreatta, Hoy, McCulley, Overman, Veale
NOES: None
ABSENT: None

CHAIRPERSON

ATTEST: _____
D.A. Gravenkamp, Executive Officer